Quarterly Economic Review

March 1992

Canada

QUARTERLY ECONOMIC REVIEW

MARCH 1992

Department of Finance Canada
Ministère des Finances Canada

Cette publication est également offerte en français.

PREFACE

The *Quarterly Economic Review* provides a timely analysis of recent developments in the Canadian economy and presents analytical work of the staff of the Department of Finance.

Most of the data used in the *Quarterly Economic Review* come from Statistics Canada. Other regular sources of data are the Bank of Canada, Canada Mortgage and Housing Corporation, the Canadian Real Estate Association, Labour Canada, the Organization for Economic Co-operation and Development (OECD), and the Conference Board of Canada.

Unless otherwise indicated, data and per-cent variations are quoted at annual rates. The cut-off date for Statistics Canada data reported here is March 11, 1992.

As with the March issue last year, a special publication, *Fiscal Indicators and Reference Tables,* is also being distributed.

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MAIN MESSAGES

- Real GDP declined in the fourth quarter. A drop in exports due to weakness in the U.S. economy was the main reason for this decline.
- Canada's CPI inflation rate fell to 1.6% in January, the lowest rate since the early 1970s.
- Canada's cost performance also continued to improve. Unit labour costs in the fourth quarter were up only 2.4% from the year before. This is the lowest rate of increase since the end of 1985.
- The Canadian dollar has fallen sharply since its peak in November. In response to recent volatility in foreign exchange markets, short-term interest rates have increased.

SUMMARY

Real GDP fell 0.8% in the fourth quarter of 1991 after two consecutive quarterly increases. The major factor in the decline was an 11.3% drop in exports. Domestic demand (GDP less net exports) increased 0.9% (Chart 1.1). For 1991 as a whole, real GDP fell 1.5% after a 0.5% increase in 1990.

The 12-month CPI inflation rate fell to 1.6% in January as the one-time effect of the introduction of the GST last January on the price level dropped out of the calculation.

The decline in the value of the Canadian dollar against its U.S. counterpart that began in November last year continued through early March. The dollar is down over 5½ U.S. cents from its November peak. Short-term interest rates have risen somewhat from the lows recorded in January in response to recent volatility in foreign exchange markets.

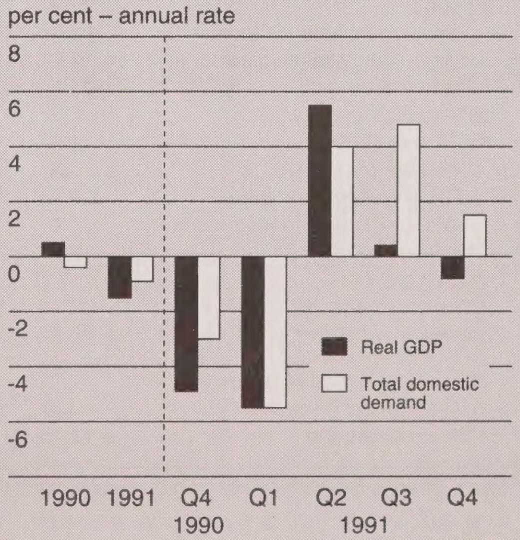
Consumer spending falls in fourth quarter

Consumer spending dropped 1.6% in the fourth quarter of 1991 after a 0.8% decline in the third. This reflects in part a low level of consumer confidence. This was particularly evident in the sharp declines in categories of expenditures that are generally considered discretionary or non-essential. Spending on consumer durables fell 16.3%, with auto purchases being especially weak. Spending on hotels and restaurants was also down.

Housing investment leads domestic demand

Residential investment increased 6.0% in the fourth quarter on the strength of construction of new houses. Starts of new houses increased considerably in the second half of the year and

Chart 1.1
Change in real GDP and total domestic demand



this was reflected in construction expenditures. Spending on alterations and improvements and real estate commissions both declined in the fourth quarter.

Two measures were announced in early 1992 that will stimulate housing activity in coming months. The minimum downpayment for NHA-insured mortgages was lowered from 10% to 5%. As well, until March 1993, households will be able to use existing RRSP funds to purchase a house.

Business investment continues to rise

Business fixed investment increased 5.7% in the fourth quarter as spending on machinery and equipment jumped 20.7%. Non-residential construction fell 14.0% in the fourth quarter. High vacancy rates in the commercial real estate sector are discouraging new construction.

The February 1992 budget announced a lowering of the manufacturing and processing tax rate as well as an increase in the capital cost allowance rate. These measures should help to stimulate investment.

Inventories rise

Inventories increased $1.8 billion in the fourth quarter, adding 0.6 percentage point to the growth rate of GDP. About three-quarters of this increase was in non-farm inventories.

Main economic indicators

(per cent changes at annual rates or per cent levels, unless otherwise indicated)

			1991				Most
	1990	1991	Q1	Q2	Q3	Q4	recent
Real gross domestic product	0.5	-1.5	-5.5	5.5	0.4	-0.8	–
Final domestic demand	0.6	-0.9	-6.6	7.6	1.3	0.3	–
Consumption	1.3	-1.1	-7.7	7.4	-0.8	-1.6	–
Residential construction	-7.6	-8.5	-27.8	42.6	17.3	6.0	–
Business fixed investment	-3.2	-1.9	2.6	1.0	3.4	5.7	–
Non-residential construction	-2.2	-3.1	1.7	2.2	0.9	-14.0	–
Machinery and equipment	-3.9	-1.1	3.3	0.2	5.0	20.4	–
Business inventory investment[1]	-0.9	0.4	3.0	-3.2	3.3	0.6	–
Non-farm[1]	-1.0	0.6	4.0	-2.5	2.8	0.6	–
Trade balance[1]	0.8	-0.6	0.0	1.4	-4.3	-2.3	–
Exports	3.8	0.6	-4.3	21.9	13.2	-11.3	–
Imports	0.8	2.5	-4.2	15.4	29.4	-3.7	–
Current account balance (nominal)	-22.0	-26.8	-22.1	-22.9	-29.9	-32.2	–
Real personal disposable income	1.2	-1.5	-6.8	5.4	-3.5	-5.0	–
Profits before taxes	-24.7	-32.3	-73.4	45.9	-1.0	-43.3	–
Costs and prices (%,y/y)							
GDP price deflator	3.0	2.7	4.1	2.1	-0.2	1.5	–
Consumer price index	4.8	5.6	6.4	6.3	5.7	4.1	1.6 (Jan.)
CPI – energy component	9.9	4.9	12.0	5.0	6.5	-3.1	6.0 (Jan.)
CPI – excluding food and energy	4.4	5.9	6.1	6.3	5.8	5.1	2.9 (Jan.)
Unit labour costs	6.2	4.1	6.3	-1.8	2.3	3.0	–
Labour market							
Unemployment rate	8.1	10.3	10.2	10.3	10.4	10.3	10.4 (Jan.)
Employment growth (%, a.r.)	0.7	-1.8	-4.7	0.9	0.1	-0.3	-1.3 (Jan.)
Financial markets (end of period)							
Exchange rate (U.S. cents)	86.21	86.54	86.38	87.59	88.33	86.54	83.68 (Mar.11)
Prime interest rate	12.75	8.00	11.25	9.75	9.50	8.00	8.25 (Mar.11)

[1] Annualized change expressed as a percentage of GDP in the previous period.

Sources: Statistics Canada and the Bank of Canada.

The increase in non-farm inventories occurred mainly at the retail and wholesale levels, as weak Christmas sales left merchants with larger-than-expected stocks.

Exports down as U.S. economy weakened

Total exports fell 11.3%, largely due to a 34.5% decline in automobile exports. Weakness in the U.S. economy was a major factor in the decline in Canadian exports. Canadian imports fell 3.7% in the fourth quarter.

Current account deficit up

The current account deficit was $32.2 billion in the fourth quarter, compared with $29.9 billion in the third. For the year 1991, the current account deficit totalled $26.8 billion, up from $22.0 billion in 1990.

The deterioration in the current account deficit in 1991 resulted largely from a decline in the merchandise trade surplus. Canada's deficit in service transactions also increased due to increased travel payments by Canadians. The deficit on net investment income payments fell slightly.

Employment down

Employment fell 0.1% in February, sending the unemployment rate to 10.6% from 10.4% in January. Employment has been falling since May reflecting the sluggish growth in output since the second quarter. In addition, the restructuring of Canadian industry to meet increased global competition has contributed to labour market dislocation. Recent job losses have been concentrated in blue-collar occupations and among workers with low levels of education.

Inflation rate drops sharply in January

Canada's inflation performance has improved steadily over the past year (Chart 1.2). In January, the 12-month rate of CPI inflation dropped to 1.6% from 3.8% in December. The January rate is the lowest in over 20 years. Canada now has the lowest rate of inflation in the G-7.

Wage pressures continue to ease

Recent wage settlements reflect the weakness in the labour market and the lower rate of price inflation. Wage increases provided in major contract settlements fell to 2.5% in the fourth quarter from 6.1% in the first quarter of the

Chart 1.2
CPI inflation rate

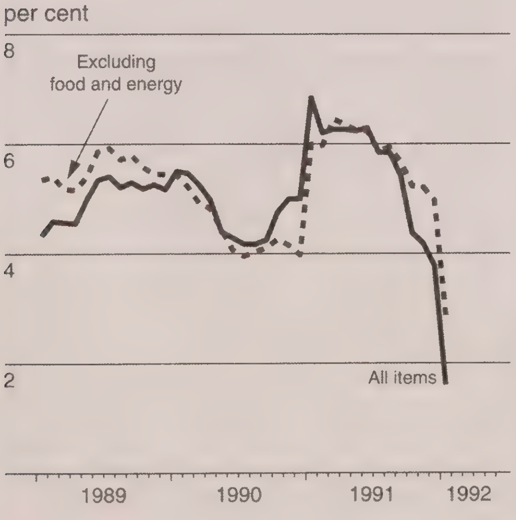
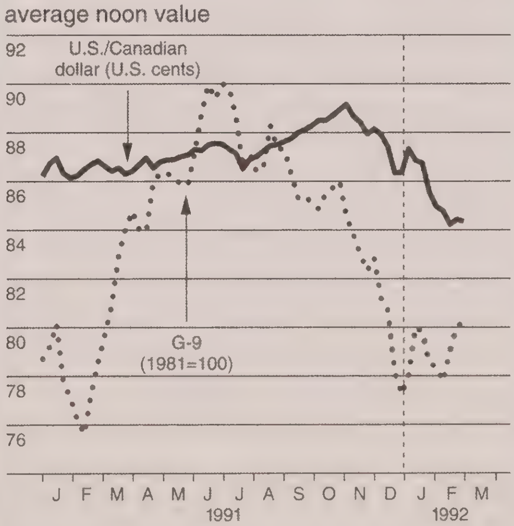


Chart 1.3
Foreign price of the Canadian dollar



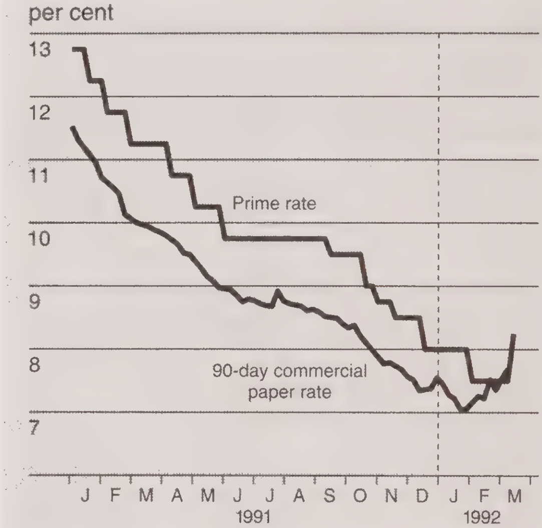
year. Private-sector settlements averaged 3.3% in the fourth quarter, continuing the downward trend since the third quarter of 1990. Public-sector settlements averaged 2.4% in the fourth quarter, reflecting the wage-restraint programs put in place by the federal and most provincial governments.

Canadian dollar off sharply against U.S. counterpart

The Canadian dollar peaked against its U.S. counterpart at U.S. $0.8929 in early November 1991 (Chart 1.3). Since then the dollar has fallen to below U.S. $0.84, its lowest point since February 1990. Recent volatility in foreign exchange markets has led to some upward pressure on interest rates. The commercial paper rate has risen roughly 75 basis points from its recent low of 7.00% in late January. In early March, most Canadian banks raised their prime lending rate 75 basis points to 8.25% (Chart 1.4).

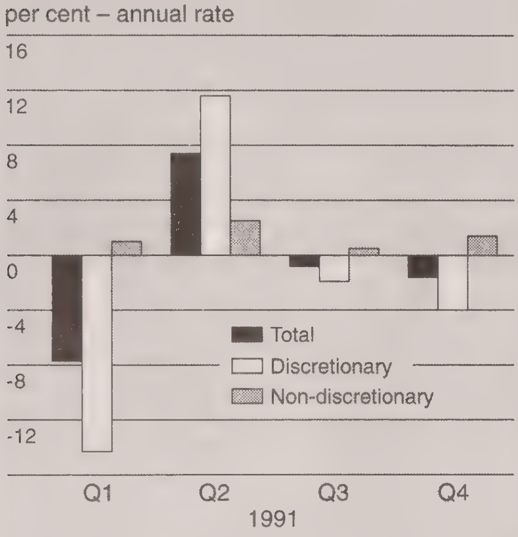
To some extent, the decline in the value of the Canadian dollar in 1992 reflects strength of the U.S. dollar. Since the start of this year, the Canadian currency has been more or less stable against major overseas currencies.

Chart 1.4
Prime rate and 90-day commercial paper rate, Canada



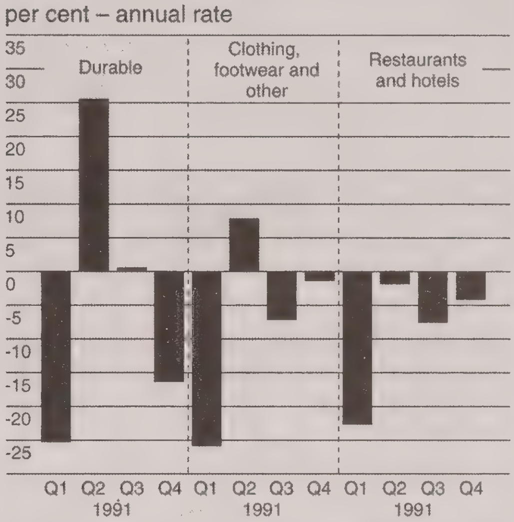
2. PERSONAL SECTOR

Chart 2.1
Change in real consumer spending by components



After a substantial increase in the first quarter of the recovery, consumer spending fell in the third and fourth quarters. The decline in the fourth quarter was concentrated in discretionary purchases, such as automobiles, furniture, appliances, clothing and expenditures at restaurants and hotels. Non-discretionary purchases, such as food and housing expenses, continued to advance in the quarter.

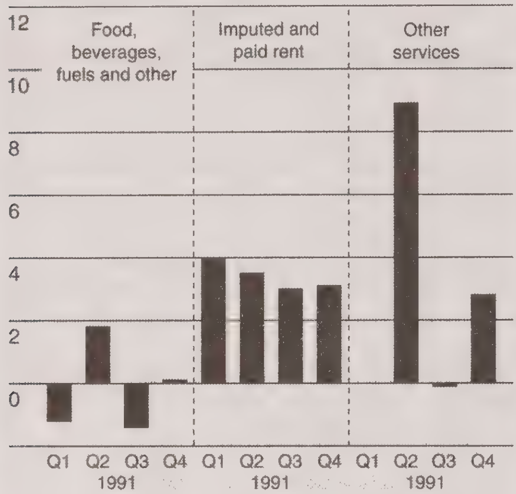
Chart 2.2
Change in real consumer spending on discretionary goods and services



The decline in discretionary spending in the fourth quarter was most evident in spending on durable goods, in particular motor vehicle products. Spending on semi-durable goods, which include clothing and footwear, declined again in the fourth quarter. These purchases have fallen by 11% since peaking in the second quarter of 1989. Spending in restaurants and hotels declined for a seventh consecutive quarter, making a 17% fall since the second quarter of 1989.

Chart 2.3
Change in real consumer spending on non-discretionary goods and services

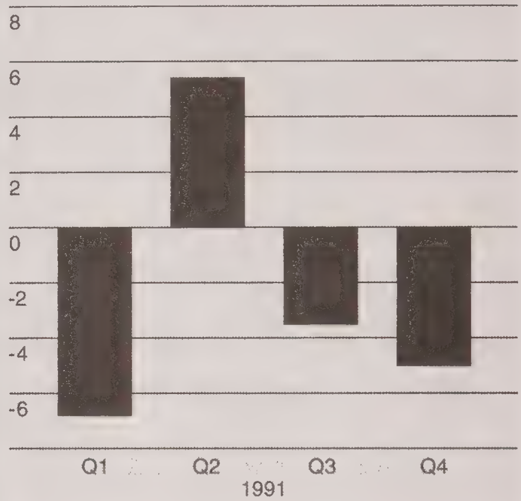
per cent – annual rate



Spending on non-discretionary goods and services strengthened in the fourth quarter. Growth in non-durable spending rebounded led by an increase in food purchases. The growth of spending on gross rent (imputed and paid), which is largely dependent on the change in the stock of housing, increased slightly in the fourth quarter. Spending on other services increased at a moderate rate.

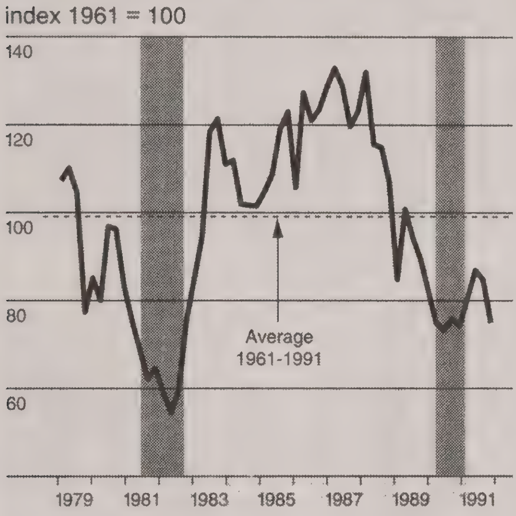
Chart 2.4
Change in real disposable income

per cent – annual rate



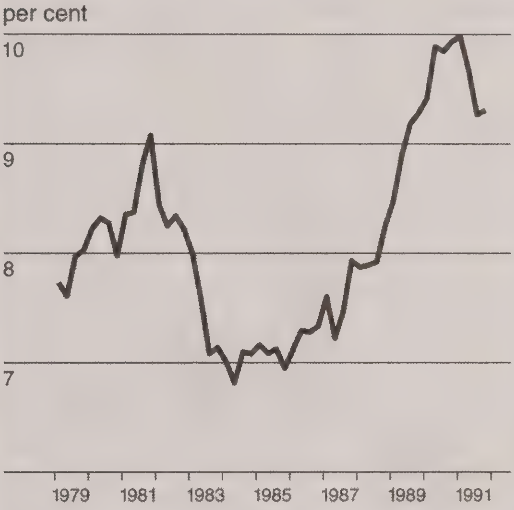
Changes in real discretionary spending over the past year have closely followed changes in real disposable income. Real disposable income rose substantially in the second quarter due to strong growth in unincorporated business income and GST tax credit payments to individuals. Since then, however, it has fallen reflecting, partly, lower employment income and lower interest and investment income.

Chart 2.5
Conference Board of Canada's Index of Consumer Attitudes



Note: shaded bars indicate periods of recession.

Chart 2.6
Interest costs as a share of disposable income



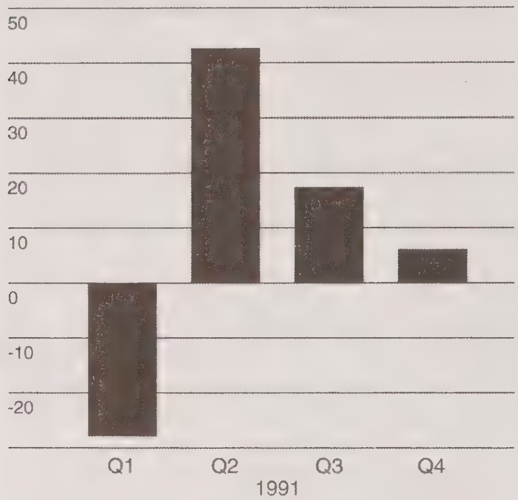
After an improvement in the first quarter of the recovery, the Conference Board Survey of Consumer Attitudes indicated that confidence dropped back to recession levels by the fourth quarter. The decline occurred in most regions of Canada, and was prompted largely by increased uncertainty about future employment conditions.

In the fourth quarter, interest costs as a share of disposable income was unchanged. They were, however, 0.7 percentage point lower than the peak reached in the first quarter of 1991. As mortgage and consumer loans are renewed, the impact of recent declines in interest rates will be reflected in lower debt-service costs.

3. HOUSING SECTOR

Chart 3.1
Change in real residential investment

per cent – annual rate



Real residential investment continued to increase in the fourth quarter, but at a slower pace than in the second and third quarters (Chart 3.1), partly due to a further decline in real estate commissions resulting from lower sales of existing houses (Chart 3.2). Investment in new housing construction also increased less rapidly in the fourth quarter as housing starts declined slightly. After a sharp gain in the previous two quarters, real spending on alterations and improvements declined in the fourth quarter.

Chart 3.2
Change in real residential investment by category

per cent – annual rate

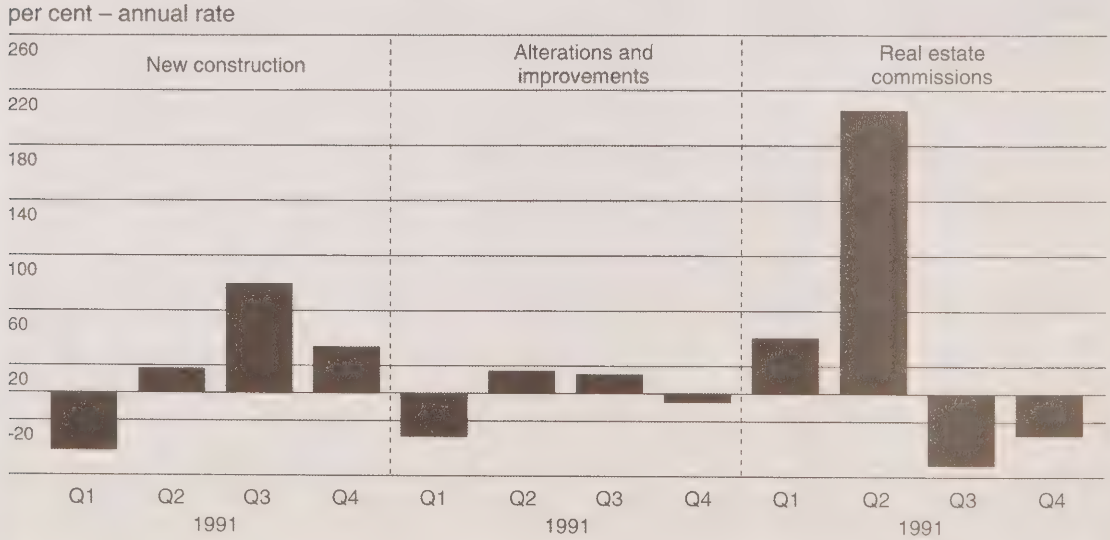
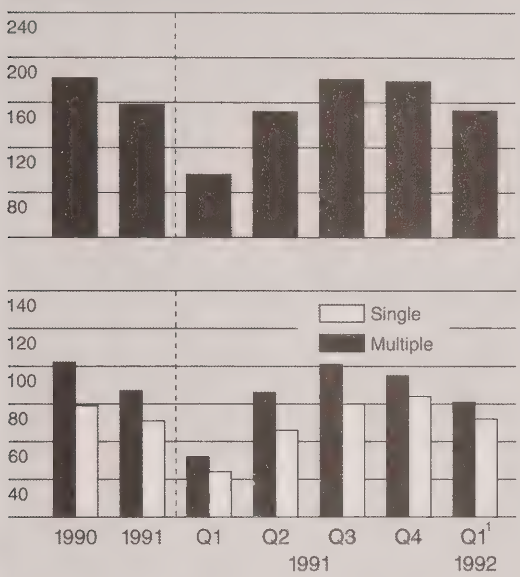


Chart 3.3
Housing starts in Canada

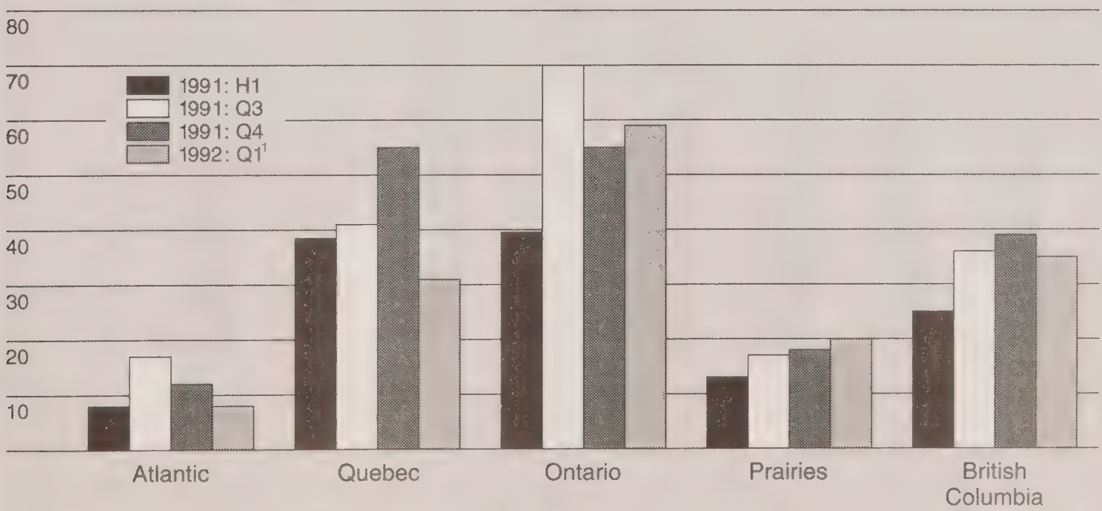


[1] The first quarter is an estimate based on January and February data for single and multiple housing starts.

Housing starts were 179,000 units in the fourth quarter, almost unchanged from the third quarter level. A decline in single dwellings starts offset the third consecutive increase in multiple dwelling starts. In January and February, housing starts fell to an average of 153,000 units.

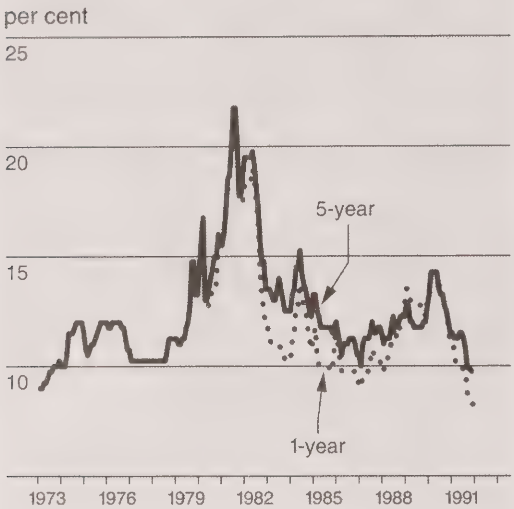
The decline in housing starts was evident in all regions, except in Ontario and the Prairies provinces. The largest declines occurred in the Atlantic provinces and in Quebec. The decline in Quebec followed a sharp gain in the fourth quarter, as households took advantage of the housing program "Mon taux, mon toit" before it ended in November.

Chart 3.4
Housing starts by region



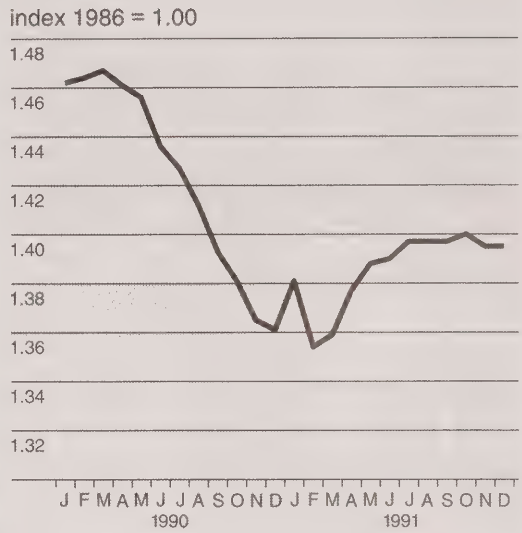
[1] The first quarter is an estimate based on January and February data for urban housing starts.

Chart 3.5
Mortgage interest rates



The improvement in new housing construction activity in the first three quarters of the recovery was helped by a significant decline in mortgage rates. By the end of February, the one- and five-year mortgage rates had declined 6.0 and 4.5 percentage points respectively since their peaks in May 1990. The one-year mortgage rate fell to 8.25%, which was the lowest level since that term was introduced by financial institutions at the end of 1979. The five-year rate was at its lowest level since August 1973.

Chart 3.6
Price of new houses[1] in Canada



[1] Analytical series from Statistics Canada adjusted for the replacement of the FST by the GST.

New house prices fell markedly in 1990 and early 1991. The recovery in demand since then, however, has strengthened prices somewhat. By December 1991, new house prices remained 6% below the peak reached in March 1990.

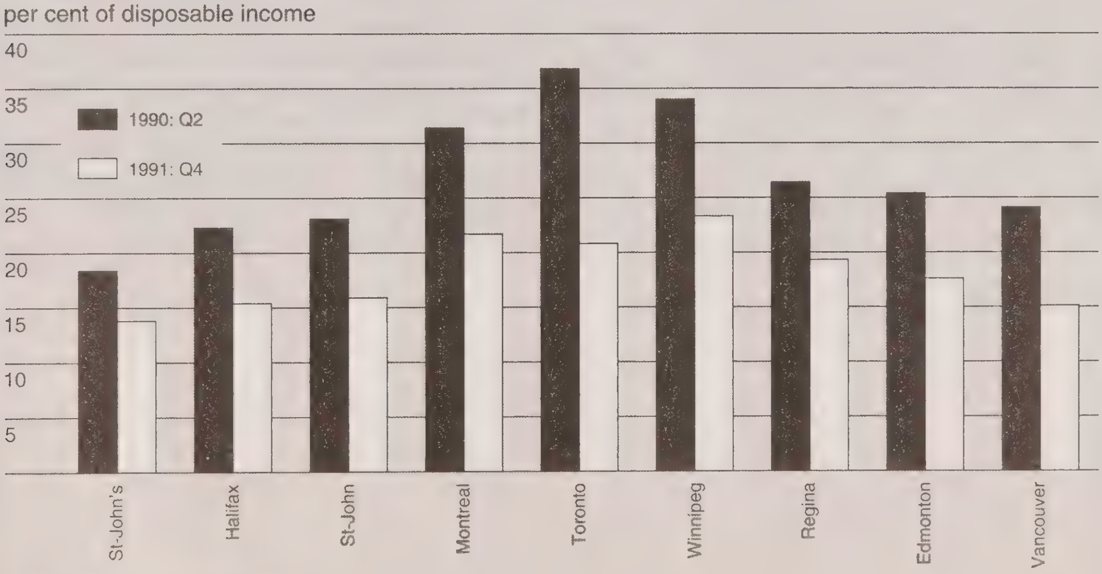
Chart 3.7
Housing affordability (monthly payments as a share of disposable income)

Lower house prices and mortgage rates have improved housing affordability. Since the second quarter of 1990, average mortgage payments on a newly purchased house have fallen 37% relative to household disposable income. This is the lowest level since the first quarter of 1987 (Chart 3.7).

The improvement in housing affordability occurred in every major metropolitan area, but the largest improvements were in Toronto and Vancouver (Chart 3.8).

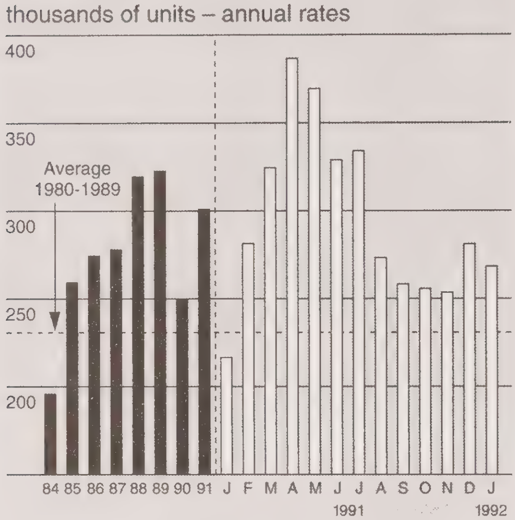
The ability to buy a home will be further improved by the February 1992 budget measure allowing RRSPs to be used to buy a home as well as the reduction in the required downpayment for NHA mortgage insurance from 10% to 5%.

Chart 3.8
Housing affordability by metropolitan region[1]



[1] Department of Finance estimates.

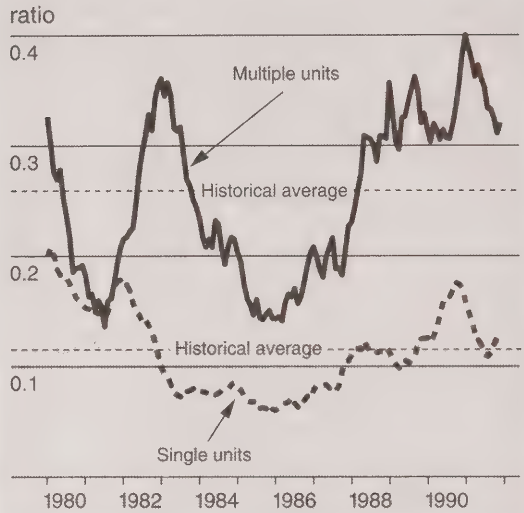
Chart 3.9
Sales of existing houses in Canada[1]



[1] Multiple Listing Service data are seasonally adjusted by the Department of Finance.

Sales of existing houses set a record in mid-1991 due to a flood of first-time buyers taking advantage of the improved affordability of housing. Since then, however, sales have stabilized and remain slightly above the average in the 1980s.

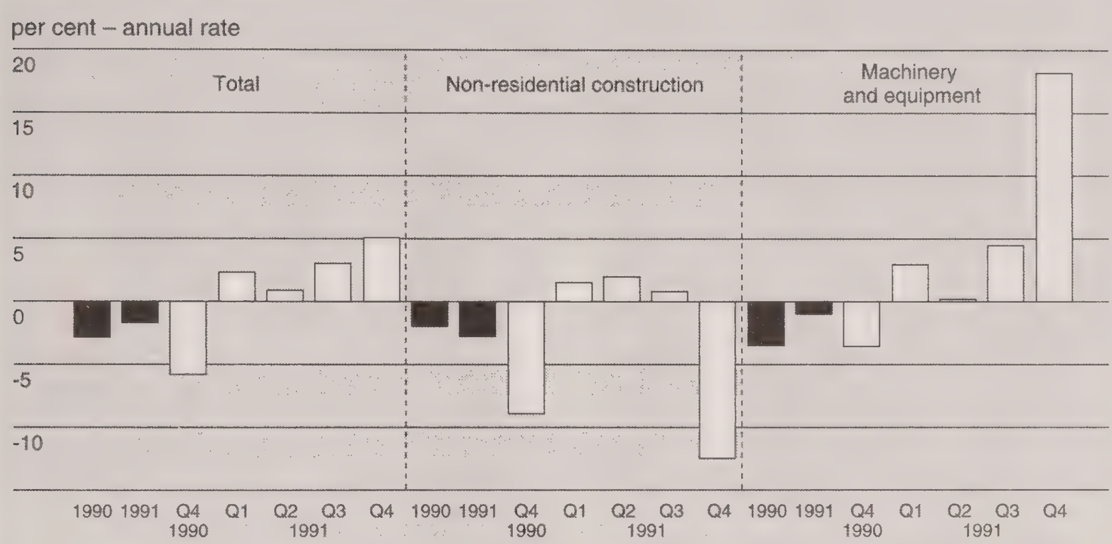
Chart 3.10
Ratio of newly completed but unoccupied dwellings to the stock of housing



The inventory of unsold single units as a share of the stock of housing increased slightly in the last four months. Despite this, it has remained close to its average level in the 1980s. The recent increase partly reflects the impact of the Quebec housing program "mon taux, mon toit" which incited builders to build more houses than demanded during the program. The inventory of multiple units relative to the stock of housing has fallen substantially since its peak at the end of 1990 but remains well above average levels.

4. BUSINESS INVESTMENT AND INVENTORIES

Chart 4.1
Change in real business fixed investment



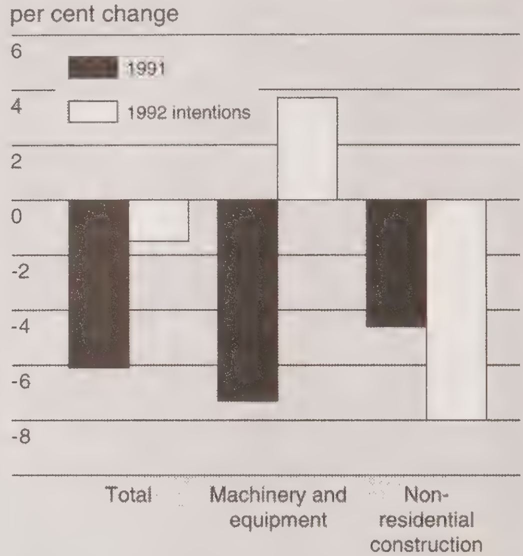
Real business non-residential fixed investment rose 5.7% in the fourth quarter – the fourth consecutive quarterly increase. Statistics Canada now estimates that investment growth averaged 2.3% over the first three quarters of 1991, up sharply from the previously reported 1.4% decline. A sharp decline in non-residential construction spending (14.0%) in the fourth quarter was more than offset by an increase in machinery and equipment investment (20.4%).

Machinery and equipment spending rose for the fourth consecutive quarter. The fourth-quarter surge was due largely to a return to more normal spending levels after exports of used aircraft subtracted from investment (and added to exports) in the third quarter. The decline in non-residential construction spending reflected weak spending on engineering projects combined with continued weakness in building construction due to high vacancy rates.

Chart 4.2
Real business investment share of GDP

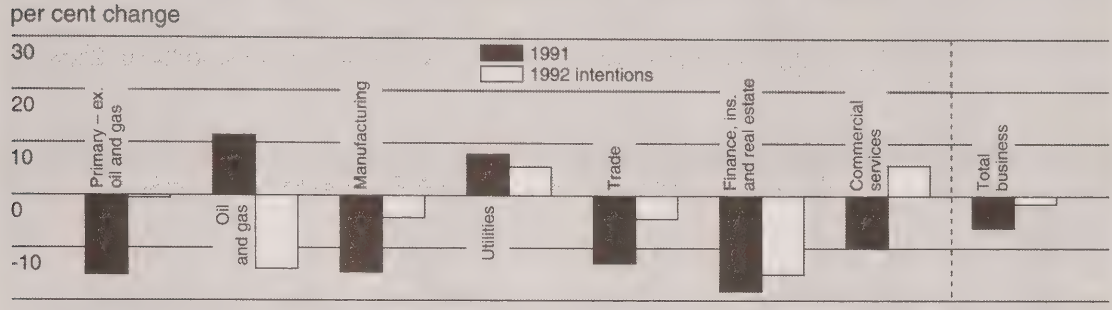
The growth in investment in recent quarters has resulted in a rise in its share of GDP. Business non-residential investment as a share of GDP increased to 13.5% in the fourth quarter, well above its 1980s average of 12.4%.

Chart 4.3
Nominal business non-residential investment intentions (PPI)



Statistics Canada recently released its survey of Private and Public Investment Intentions (PPI) for 1992. According to this survey of nearly 75,000 Canadian businesses, nominal business non-residential investment will decline 1.5% in 1992 following a 6.1% fall in 1991. Growth in machinery and equipment spending is expected to be more than offset by continued declines in non-residential investment.

Chart 4.4
Nominal business non-residential investment intentions by sector



The PPI shows intended investment in the utilities sector up 5.5% in 1992, following an increase of 7.9% in 1991. Intended spending by electric-power utilities in Ontario, Quebec and, to a lesser extent, Alberta account for most of the increase. Spending by the oil and gas industry is expected to fall 14.0% in 1992, following a 1991 increase of 11.4%. The decline is concentrated in Alberta where the outlook for oil and gas prices has led to curtailed exploration and development budgets.

After experiencing the sharpest decline in 1991, Quebec shows an increase in intended spending for 1992. This increase is entirely due to increased intended spending by utilities. Atlantic Canada has the largest decline in intended spending for 1992. Intended investment for the region in 1992 was sharply reduced following the recently announced delay of the Hibernia project.

Chart 4.5
Nominal business non-residential investment intentions by region

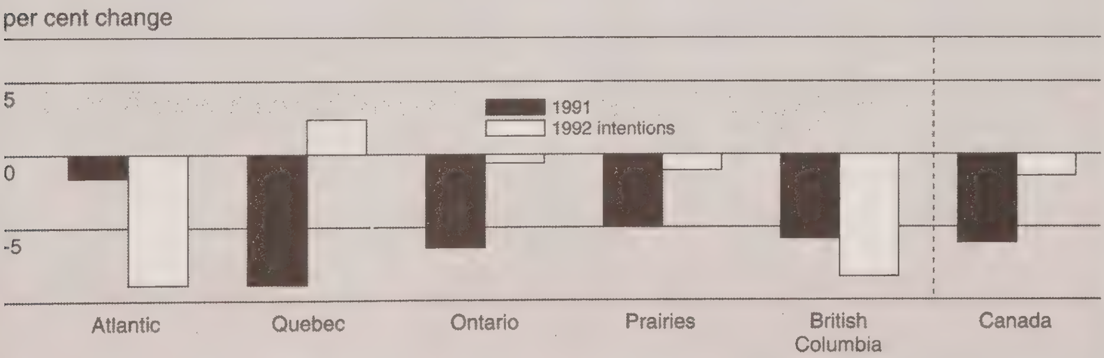
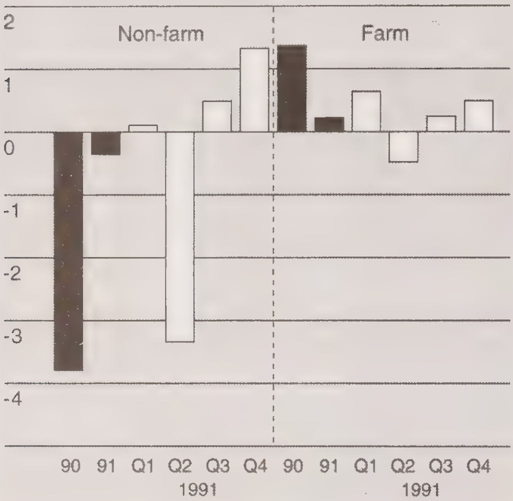


Chart 4.6
Real business inventory investment

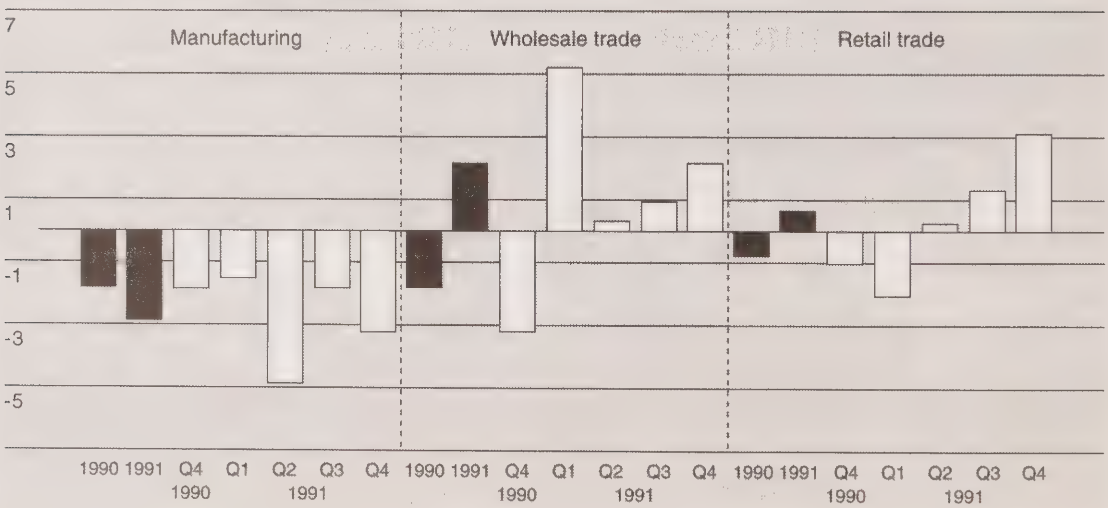
billions of 1986 dollars – annual rate



Total inventories rose $1.8 billion in the fourth quarter following an accumulation of $732 million in the third. Non-farm inventories accounted for $1.3 billion of the fourth-quarter rise. The increase in non-farm inventories was concentrated in the retail and wholesale trade sector which could reflect weaker-than-expected sales in the quarter. Inventories at the manufacturing level fell for the eighth consecutive quarter.

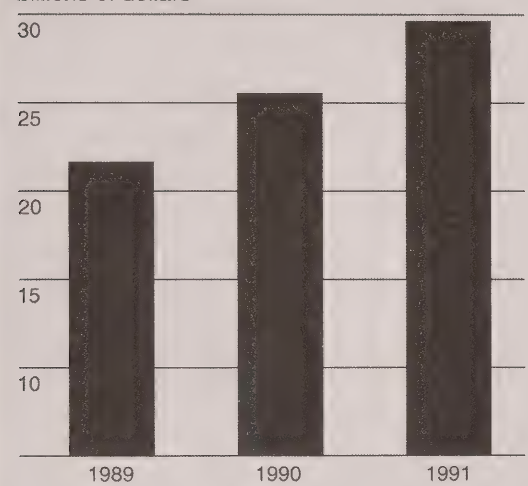
Chart 4.7
Real business inventory investment, non-farm

billions of 1986 dollars – annual rate



5. Government Sector

Chart 5.1
Federal government deficit (CIEA basis)



The federal deficit (CIEA basis) in 1991 stood at $29.6 billion. Most of the $4.1 billion increase in the deficit in 1991 resulted from the impact of the 1990-1991 recession on corporate income taxes and transfers to persons, most notably unemployment insurance benefit payments.

Revenues were up 5.5% in 1991. However, most of the increase related to the netting of the federal sales tax inventory refund to 1990, which dampened overall revenues in that year. In contrast, direct taxes on corporations declined significantly, reflecting the weakness in corporate profits.

Total expenditures increased 7.3% in 1991, largely due to higher unemployment insurance benefits, the payment of the quarterly low-income GST credit, small business GST transitional grants and higher agricultural subsidies.

Chart 5.2
Change in federal government revenues and expenditures in 1991 (CIEA basis)

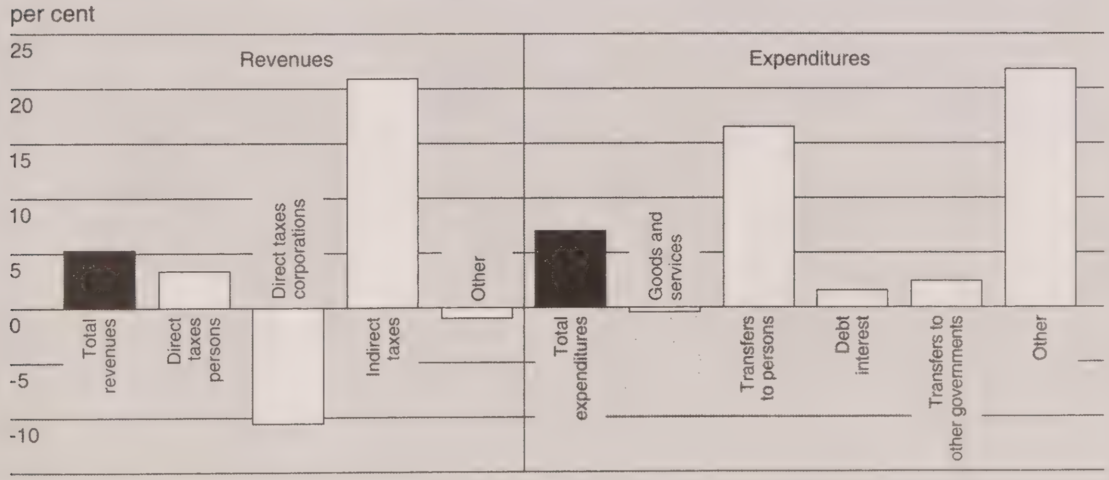
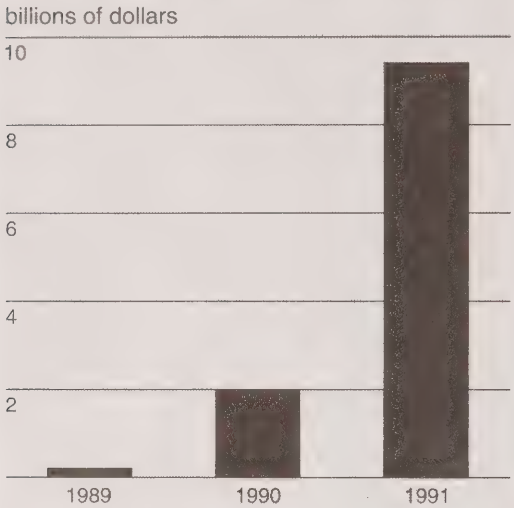
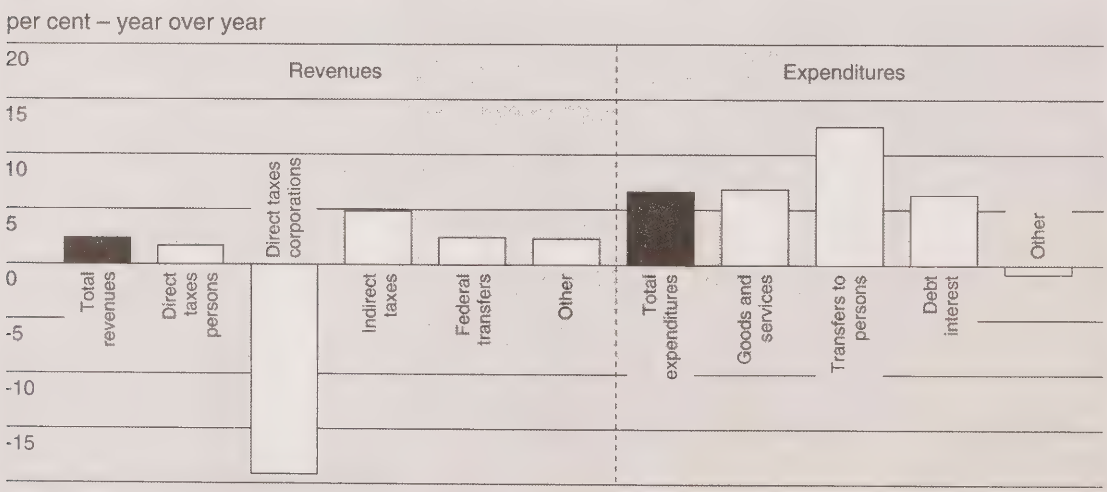


Chart 5.3
Provincial-local governments and hospitals deficit (CIEA basis)



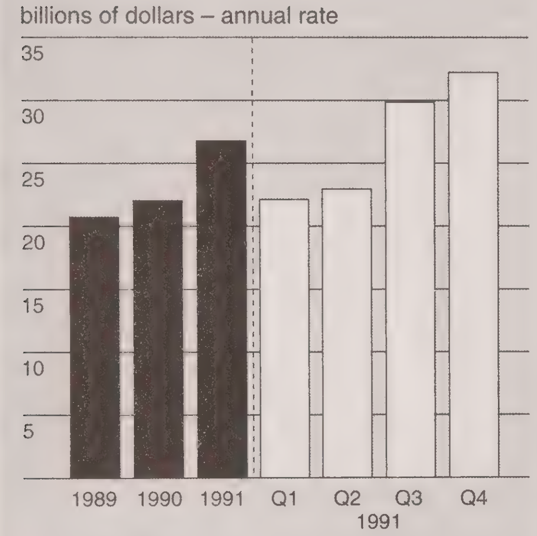
The consolidated deficit for the provincial-local-hospital sector deteriorated $7.4 billion to $9.4 billion in 1991 (Chart 5.3). This deterioration resulted mainly from a decline in direct taxes on corporations (19.1%) combined with strong growth in expenditures on transfers to persons (12.6%) (Chart 5.4). Total revenues grew a modest 2.4% in 1991, the smallest rate of growth in the last 30 years.

Chart 5.4
Change in provincial-local governments and hospitals revenues and expenditures in 1991 (CIEA Basis)



6. INTERNATIONAL TRADE

Chart 6.1
Current account deficit



In the fourth quarter of 1991, the current account deficit was $32.2 billion, up from $29.9 billion in the third (Chart 6.1). Over half of the deterioration was from the transfers balance, as foreign withholding taxes rose sharply. The deterioration in the services balance was largely due to the continued deterioration in the travel account. There were slight deteriorations in both the merchandise trade and investment income accounts. The worsening in the investment income account reflected a worsening in net interest payments (Chart 6.2).

In 1991, the current account deficit rose to a record annual level of $26.8 billion from $22 billion in 1990.

Chart 6.2
Current account balance by component

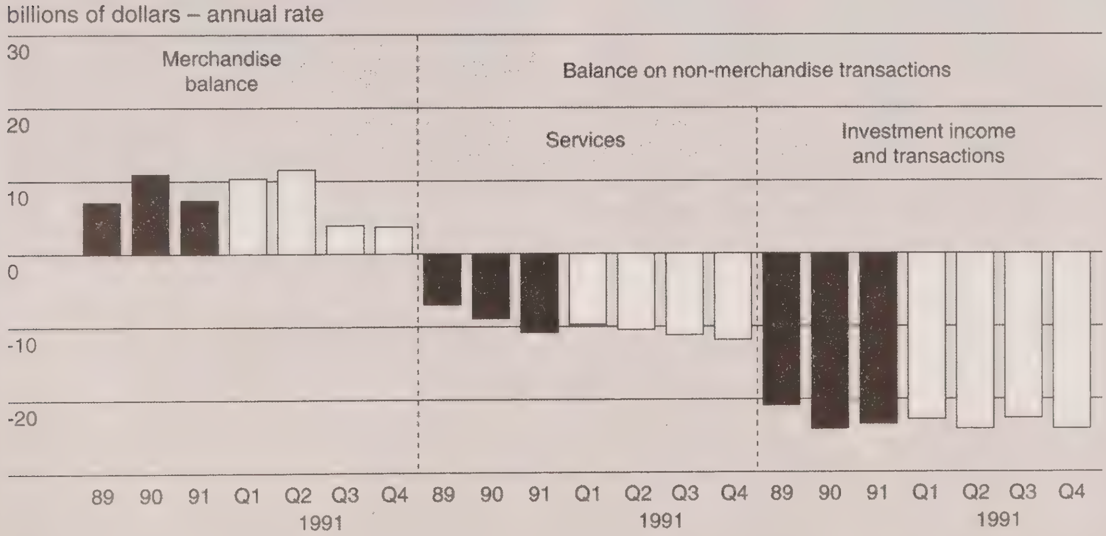
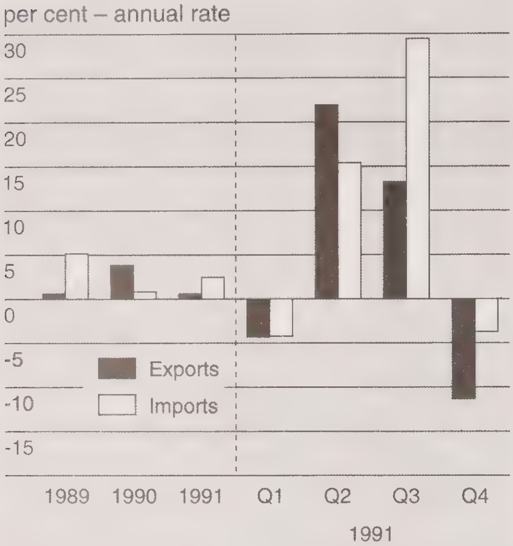
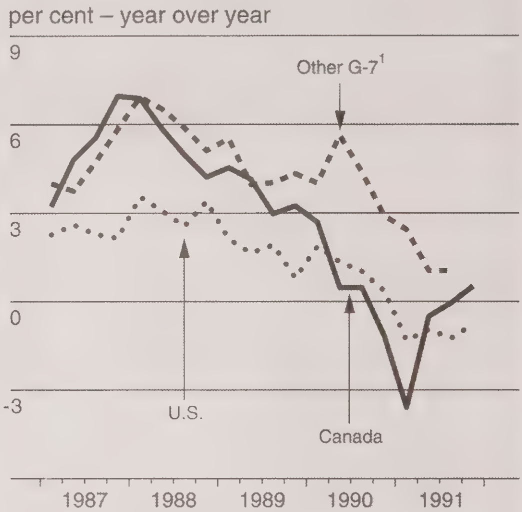


Chart 6.3
Change in real exports and imports of goods and services



Both real exports and imports decreased in the fourth quarter of 1991. Merchandise exports fell almost 13% while merchandise imports decreased over 8%. Exports of services increased modestly while imports of services were up strongly due to the rise in expenditures of Canadians travelling outside the country.

Chart 6.4
Change in final domestic demand in Canada, the U.S. and other G-7 countries



[1] The other G-7 countries are Japan, Germany, the United Kingdom and France. Italy was excluded since data for it only went back to 1989.

The decline in Canadian exports can be traced largely to weakness in the economies of Canada's major trading partners, notably the United States. Imports into Canada have been constrained by the weakness in real final domestic demand in Canada.

Chart 6.5
Canadian real exports of and U.S. spending on automotive products

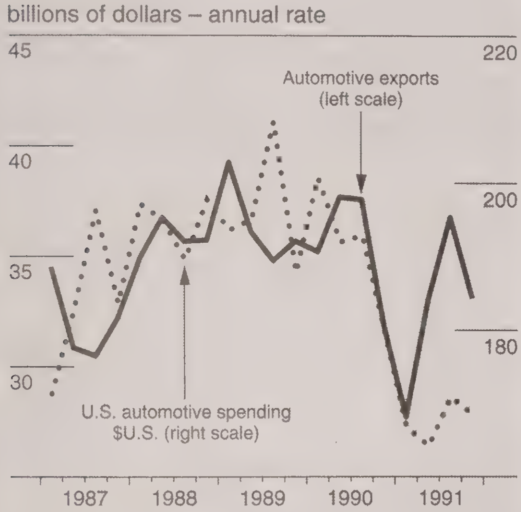
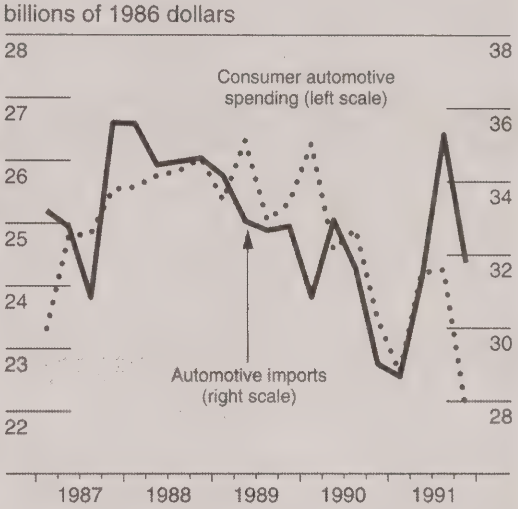


Chart 6.6
Canadian consumer expenditure on and imports of automotive products

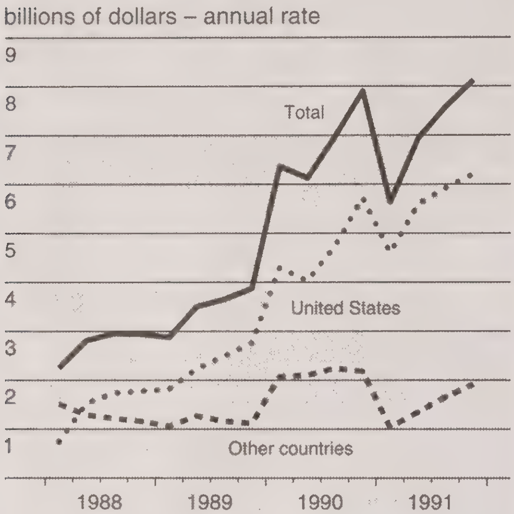


In the fourth quarter, sharp decreases in automotive and wheat exports were the major contributors to the decline in real merchandise exports. The drop in automotive exports partly reversed sharp increases in the second and third quarters.

Despite the weakness in automotive exports during 1991, they rose a share of U.S. spending. There may have been an attempt to raise the low inventory-to-sales ratio in the United States for North American automotive products. About 90% of Canadian automotive exports go to the United States.

The decline in real imports into Canada in the fourth quarter was fairly widespread among major categories. Imports of automotive products fell over 30%, reflecting weak demand in Canada. Their share of Canadian spending, however, rose. Some of this increase went into inventories. Also, imports were supported by the performance of automotive exports, as motor vehicles produced in Canada contain a significant amount of imported components. The major exception to the general weakness in imports was an 11% increase in the machinery and equipment category, a positive sign for domestic investment spending.

Chart 6.7
Canada's travel deficit



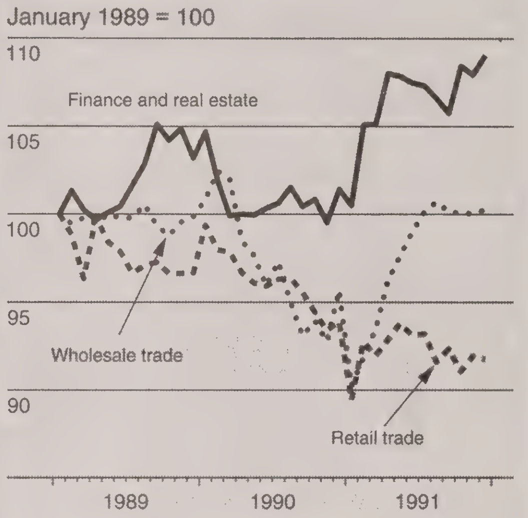
The travel deficit with the United States has been deteriorating for several years (Chart 6.7). This deterioration is partly due to the growth in the number of Canadians travelling to the United States to shop.

The travel deficit with countries other than the United States improved in 1991.

7. Output

Chart 7.1
Real GDP at factor cost

Chart 7.2
Real GDP at factor cost: service-sector industries



Following a strong performance in the second quarter, real GDP at factor cost stagnated in the third quarter and fell 1.0% in the fourth. For 1991 as a whole, output declined 1.1%.

Output of the service sector rose 0.6% in the fourth quarter, compared to a contraction of 4.0% for the goods sector. This represents a reversal of virtually all the third-quarter goods-sector output growth, but an improvement in service-sector performance. In the second quarter, both goods- and service-sector output grew strongly.

The number of goods-producing industries experiencing growth also declined somewhat in the fourth quarter while the number for services rose.

Service-sector performance was mixed in the fourth quarter. Wholesale trade declined marginally (0.8%), following a large increase in the third quarter. Retail trade contracted 3.4% in the fourth quarter following a similar decline in the third. One of the strongest service-sector industries in the fourth quarter was finance and real estate. Output in this industry grew 7.4%, following a 4.5% decline in the third quarter.

Chart 7.3
Real GDP at factor cost: goods-sector industries

January 1989 = 100

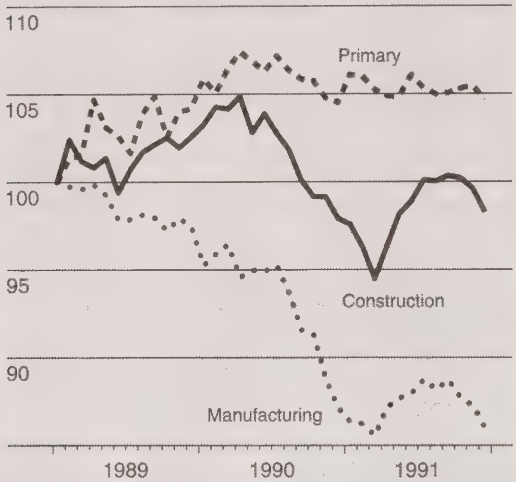
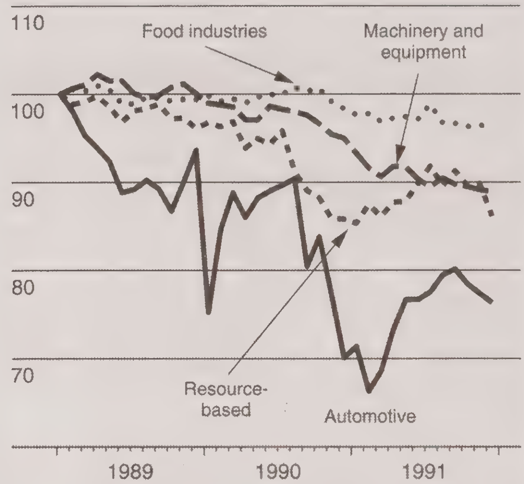


Chart 7.4
Real GDP at factor cost: manufacturing industries

January 1989 = 100



Following strong growth in the third quarter (10%), output of the construction industry declined 3.1% in the fourth. The weakest component again was non-residential building construction which contracted 20.0%. Other non-residential construction, predominantly engineering and energy-related, declined 4.9%. Residential construction continued to advance strongly.

Manufacturing output declined 6.9% in the fourth quarter, leaving output 0.5% above its trough in March 1991. Output of primary industries (agriculture, fishing and trapping, logging and forestry, and mining) has remained relatively stable since early 1991.

Virtually all major components of the manufacturing sector contracted in the fourth quarter. The weakness was concentrated in the automotive and resource-based sectors which contracted 8.2% and 10.0%, respectively. These declines followed a very strong third quarter. Output of food industries and machinery and equipment industries also fell significantly. Machinery and equipment output has been on a downward trend since early 1989.

8. LABOUR MARKET

Chart 8.1
Growth in employment and the labour force

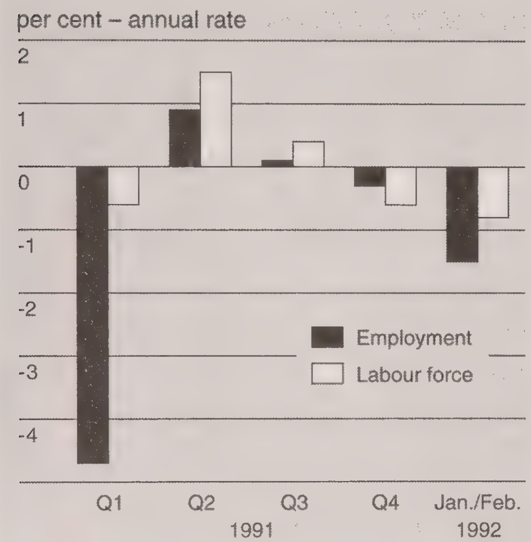
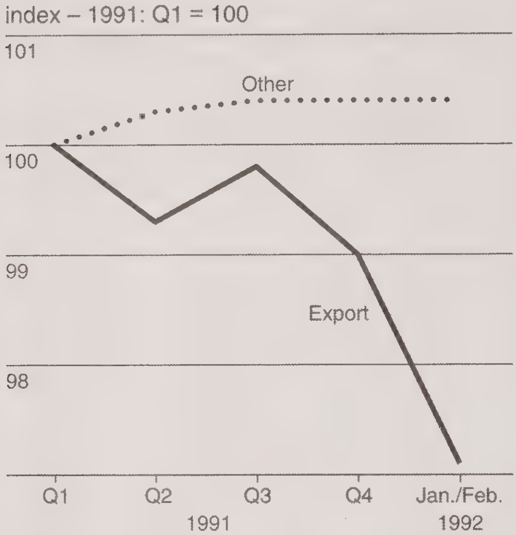


Chart 8.2
Unemployment rate

Overall labour market conditions have changed little since the trough in output reached in the first quarter of 1991. Changes in the labour force have closely followed the changes in employment since the first quarter of 1991.

As a result, the unemployment rate has remained largely unchanged since the beginning of 1991. In February 1992, the unemployment rate was 10.6%, compared to the previous peak of 12.8% reached in the last quarter of the 1981-1982 recession.

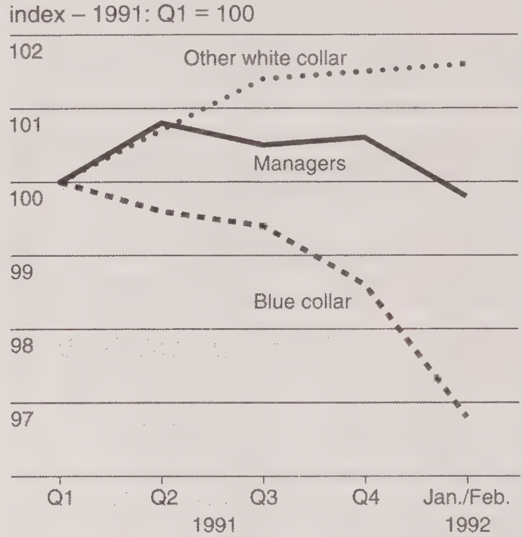
Chart 8.3
Employment in export-oriented industries[1]



[1] Export-oriented industries include mining, fishing, forestry, manufacturers of products made from wood, primary metals, non-metal minerals, petroleum, coal and chemicals, paper and transportation equipment manufacturers and the transportation sector.

The employment declines in the last two quarters have been more severe in export-oriented industries, reflecting weakness in the U.S. economy. Employment in these industries dropped 1.9% during the first two months of 1992 after falling 1.0% in the previous three quarters. Employment in other industries, on the other hand, has increased slightly over the past year.

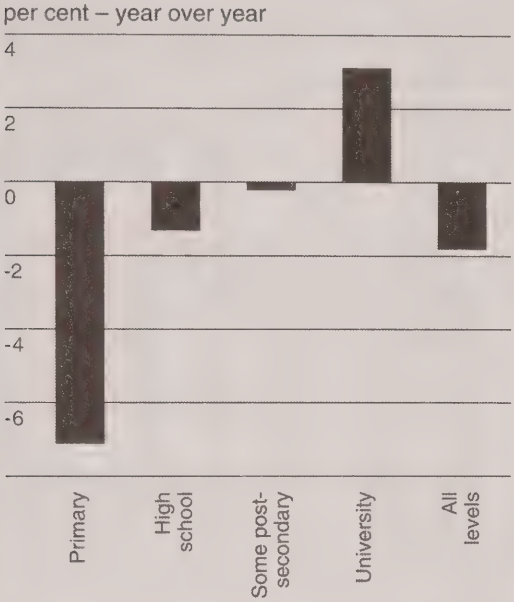
Chart 8.4
Employment by occupation



The recent weakness in export-oriented industries led to a decline in employment for workers in blue-collar occupations. Total employment for workers in primary, processing, transportation and other blue-collar occupations has fallen 3.2% from the first quarter of 1991.

Employment in white-collar occupations has held up better. The number of employed managers and other professional workers in January and February was only slightly below its level in the first quarter of 1991. Employment in the remaining white-collar occupations (clerical, sales and service workers) has grown steadily since the end of the last recession.

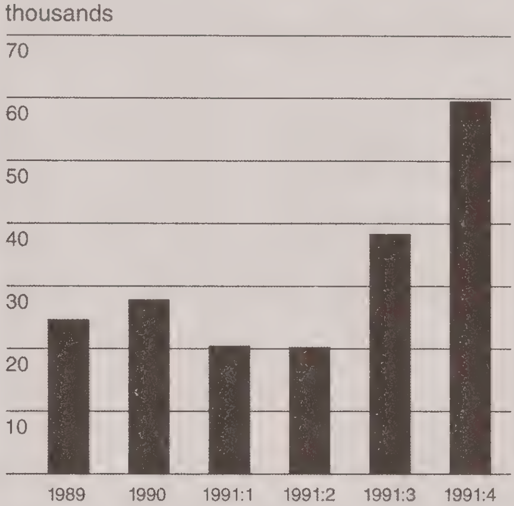
Chart 8.5
Employment growth by education level



Workers with low education levels have been affected most by weak demand and industry restructuring. Workers without secondary education accounted for almost all of the job losses between 1990 and 1991, as their employment declined 7.1%. By contrast, employment of university graduates grew 3.1%.

The poor job prospects for people with low levels of education has encouraged youths to stay in school. The average number of youths between 15 and 24 years of age who attended school full time in 1991 rose 3.7% from 1990, even though their population declined 0.7%. Enrollment in university jumped almost 35,000 in the fall of 1991.

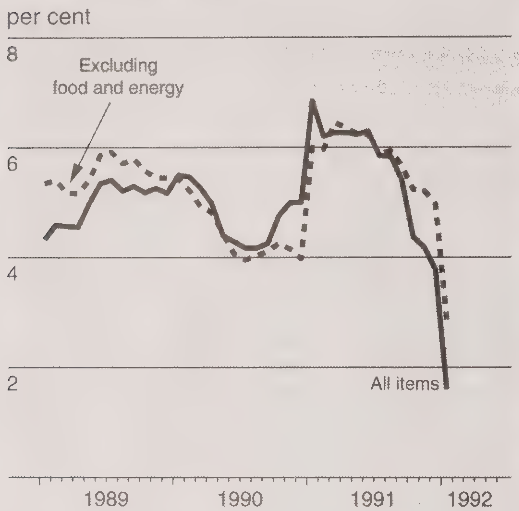
Chart 8.6
Unemployment insurance claimants receiving training benefits



The federal government has allotted more money to train unemployed workers through the Labour Force Development Strategy. This has allowed the number of unemployment insurance claimants collecting training benefits to triple since the beginning of 1991, reaching an average of 60,000 people per month in the fourth quarter of 1991.

9. Prices and wages

Chart 9.1
CPI inflation rate



Inflation has fallen sharply over the past year. In January, the 12-month rate fell to 1.6%, its lowest level since January 1971 (Chart 9.1). The inflation rate excluding food and energy declined to less than 3% in January. Over the last 20 years this measure of the inflation rate has averaged 6.6%.

Canada's inflation rate in January was lower than the rate in any other G-7 country (Chart 9.2). The last time this happened was in March 1971.

Chart 9.2
CPI inflation rates in G-7 countries
January 1992

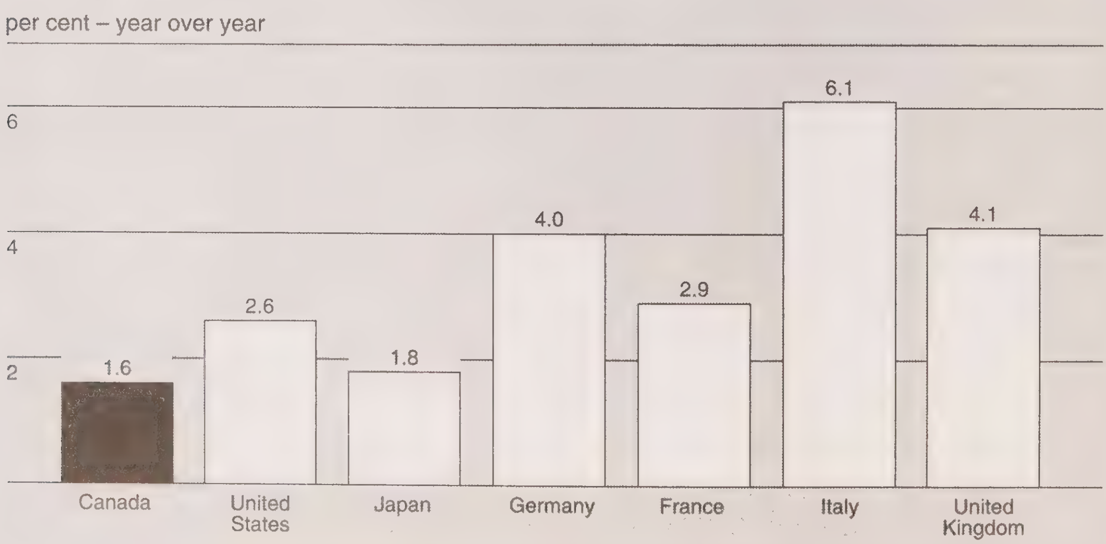


Chart 9.3
Growth of average wages and unit labour costs

per cent – year over year

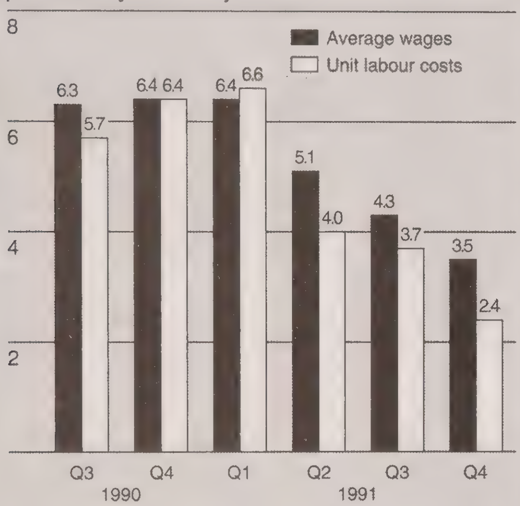
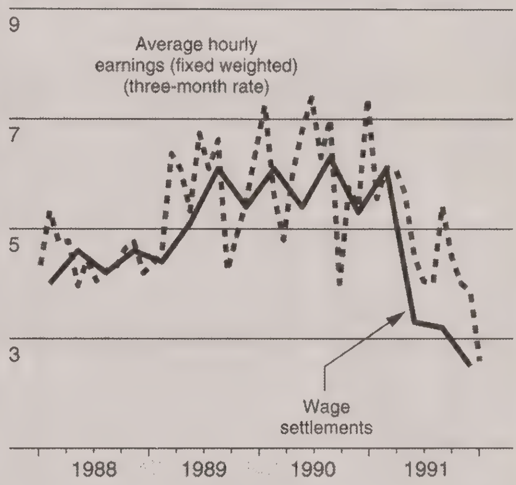


Chart 9.4
Wage settlements and average hourly earnings

per cent

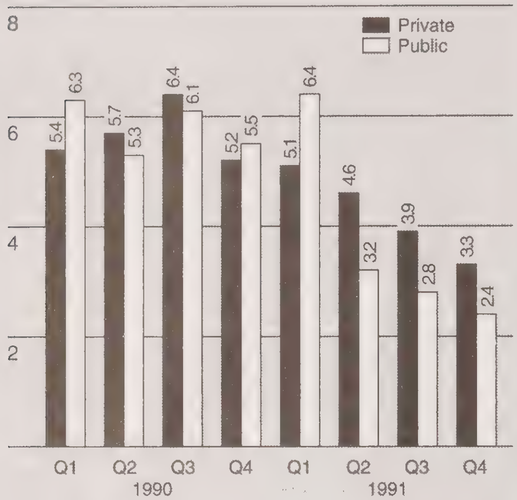


Virtually all measures of wage inflation have eased significantly over the past year. Average wage growth fell to 3.5% in the fourth quarter from 6.4% a year earlier. A substantial easing in the growth of unit labour costs (which is a measure of wage growth adjusted for productivity) bodes well for our future competitive position.

The easing is especially pronounced in the wage settlements data covering large collective agreements. After trending up from 4% to 6% between 1988 and 1990, total wage settlements fell sharply in 1991. In the fourth quarter, the average settlement was 2.5%. Fixed-weighted average hourly earnings, following a similar pattern, fell in December to less than 3% on a three-month annualized basis.

Chart 9.5
Private- and public-sector wage settlements

effective annual per cent increase



The easing in wage settlements has occurred in both the private and public sectors. In the public sector, wage settlements fell from a peak of 6.4% in the first quarter of 1991 to 2.4% in the fourth quarter, largely reflecting the wage-restraint programs implemented by the federal and most provincial governments.

1992 bargaining calendar

Expiries and carry-overs in selected jurisdictions

	Total	Public	Private
	(thousands of employees)		
Quebec	474	411	64
Ontario	431	227	203
British Columbia	209	124	85
All others	531	386	146
Total	**1,645**	**1,148**	**498**

In 1992, the bargaining calendar is slightly heavier than normal; 1.6 million employees will be involved in contract negotiations. Approximately 70% of these employees will be in the public sector, compared to over 80% in 1991. Quebec is the province with the largest number of public-sector employees negotiating. Ontario has the largest number of private-sector employees negotiating; construction is the largest industry involved.

10. FINANCIAL SECTOR

Chart 10.1
Foreign price of the Canadian dollar

average noon value

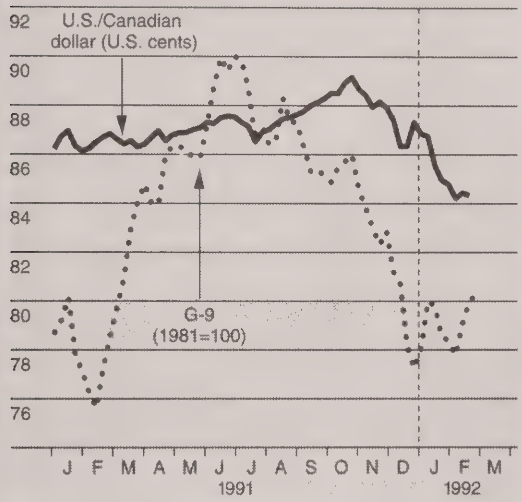
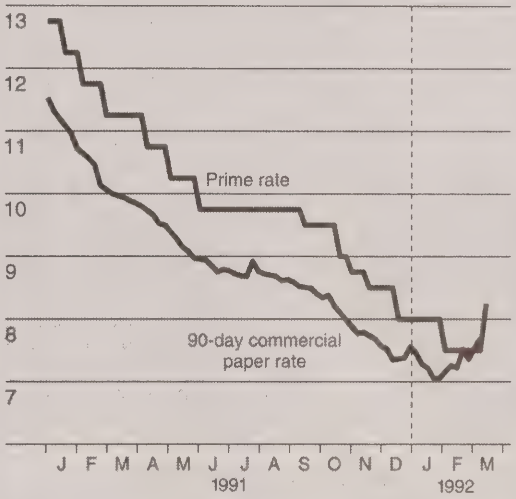


Chart 10.2
Prime rate and 90-day commercial paper rate, Canada

per cent



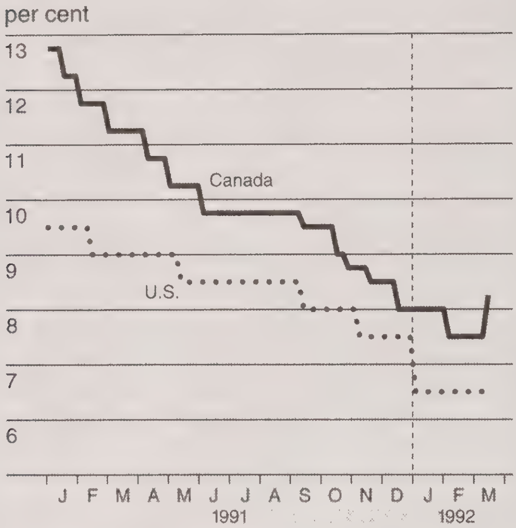
The depreciation of the Canadian dollar versus its U.S. counterpart, which began in the fourth quarter of 1991, continued in the first quarter of 1992. The dollar peaked at 89.29 U.S. cents on November 1. On March 10, the dollar closed at 83.55 U.S. cents.

The Canadian dollar also fell against major overseas currencies, as measured by the G-9 currency index, in the fourth quarter of 1991. The dollar levelled off, however, in the first quarter of 1992. On March 10, the index was down 9.4% from its peak in July 1991.

The recent volatility in foreign exchange markets has led to upward pressure on interest rates. The 90-day commercial paper rate, which had declined ½ percentage point in January to 6.97%, rose in February and March. The 90-day commercial paper rate was 7.78% on March 10.

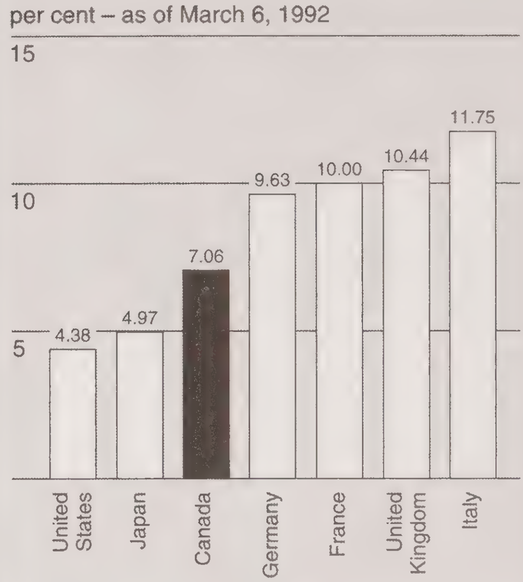
In January, the prime rate fell to 7.50%, the lowest level in almost 19 years. On March 6, however, most chartered banks raised their prime rate to 8.25%.

Chart 10.3
Canada and U.S. prime rates since January 1991



The prime rate in Canada fell faster than its U.S. counterpart in 1991. Hence, the differential between the Canadian and U.S. prime rate narrowed, from 325 basis points in January 1991 to 150 basis points in December. This is slightly above the average differential over the 1980s of about 100 basis points. Following the Canadian prime rate increase on March 6, the differential was 175 basis points.

Chart 10.4
Short-term interest rates (three-month eurocurrency deposit rates)

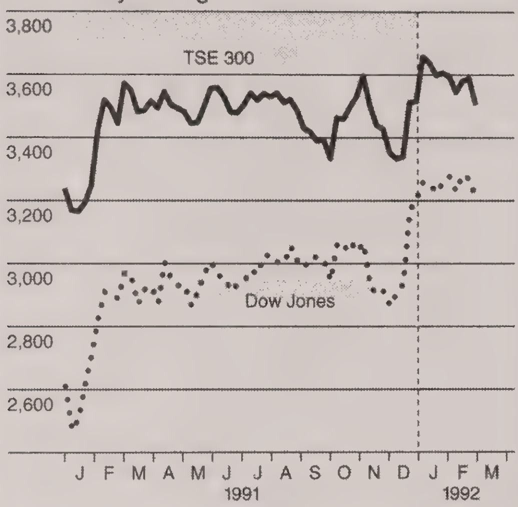


Even with the increase in interest rates in February and March, Canada still had the third-lowest short-term interest rates (as measured by three-month eurocurrency deposit rates) among the G-7 countries in the first quarter of 1992. Canadian rates were between 2½ to 5 percentage points below European rates. The United States and Japan continued to have lower interest rates than Canada.

European short-term interest rate differentials narrowed in the first quarter. German and French rates were relatively stable while Italian and U.K. rates fell. Japanese interest rates also fell, by more than ½ percentage point in the first quarter. U.S. rates remained steady.

Chart 10.5
TSE and Dow Jones indexes since January 1991

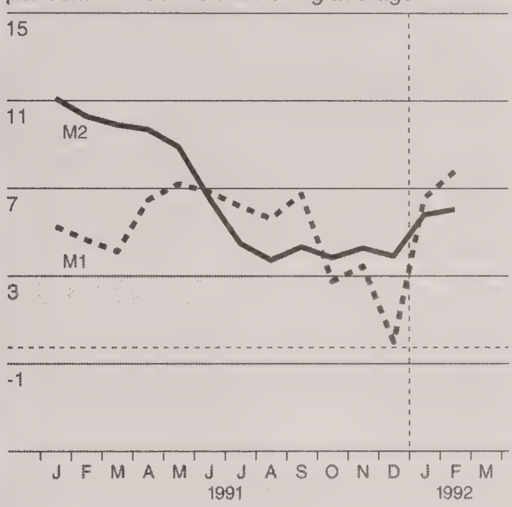
Wednesday closing values



North American equity markets rose in December 1991 in response to a Federal Reserve discount rate cut and prospects for economic growth in 1992. By March 10, the Toronto stock exchange index of 300 industrials (TSE 300) had risen 6.2% from its trough on December 17. The Dow Jones Industrial Average had risen 12.8% from its trough on December 10.

Chart 10.6
Growth in monetary aggregates since January 1991

per cent – three-month moving average



After falling in the last quarter of 1991, M1 growth, which some economists consider a leading indicator of spending, increased sharply in January. The three-month moving-average growth rate of M1 increased to 6.5% in January and 7.8% in February from virtually no growth in December.

M2 growth, after hovering around 4% in the second half of 1991, rose to 6.0% in February.

SPECIAL REPORT

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11. THE DEPARTMENT OF FINANCE'S ECONOMIC AND FISCAL FORECASTING RECORD: UPDATE

Following the release of each federal budget, there is typically a public discussion on the likely accuracy of the budget's economic and fiscal outlooks. The Department of Finance addressed the question of the accuracy of its economic forecasts in the December 1989 *Quarterly Economic Review* and updated the analysis in the March 1991 issue. The Department's economic forecasts which are released with each federal budget were evaluated both relative to the actual outcomes of key economic indicators and relative to a survey of 14 private-sector forecasters. Both studies found that, on average, over the 1985 to 1990 period, the Department's forecasts have been more accurate than the private-sector forecasters surveyed.

This study extends the sample period used in the earlier studies to include 1991. The Department's overall ranking does not change when the additional year is added: the Department's forecasts rank first, on average, over the 1985 to 1991 period.

The Department's budgetary deficit outlook is largely dependent upon its economic forecasts. Given the accuracy of its economic forecasts, it is therefore not surprising that its deficit forecasts have also been relatively on track.

THE ACCURACY OF THE DEPARTMENT'S ECONOMIC FORECASTS

Table 11.1 compares the Department's one-year ahead forecasts to historical data for four key macroeconomic variables over 1985 to 1991.[1] The key points to note are:

- The Department of Finance's forecasts have understated the strength of real GDP growth by 0.4 percentage points, on average, between 1985 and 1991.
- The tendency to underpredict growth has resulted in an overestimation of the unemployment rate over the same period.
- The Department's forecasts of CPI inflation have been very accurate, deviating from the actual rate of inflation by only 0.1 percentage point, on average.
- On average, between 1985 and 1991, the Department underestimated interest rates by 0.3 percentage points.

[1] There have been historical revisions to the Income and Expenditure Accounts data since the completion of the March 1991 study on forecast accuracy. The analysis in this note takes into account these revisions and incorporates the latest Income and Expenditure Accounts data that were released February 28, 1992.

Table 11.1
The accuracy of the Department's economic forecasts
(Average of seven one-year ahead forecasts, 1985-1991)

	Average Finance projection	Actual average
Real GDP growth	2.2	2.6
Unemployment rate	9.2	8.9
CPI inflation rate	4.5	4.6
90-day commercial paper rate	9.8	10.1

Comparison with private-sector economic forecasts

The Department's forecasting record was also evaluated relative to the accuracy of the 14 private-sector projections that were consistently available at the time the Finance forecasts were published and to the private-sector consensus (an average of the 14 private-sector forecasts).

Two conventional methods were used to evaluate the accuracy over time of the forecasts for the four economic indicators. (Such techniques are also used in studies such as the Financial Times' annual analysis of forecast records.) The first averages the errors for each indicator over the 1985 to 1991 period. In this fashion, overestimates and underestimates are offsetting. A second methodology is to average the absolute values of the annual forecast errors. Charts 11.1 and 11.2 summarize the results.

The record:

- Both the average forecast errors and the average absolute forecast errors indicate that the Department of Finance had a better track record than the private-sector consensus at forecasting real GDP growth and the unemployment rate over the 1985 to 1991 period.
- Finance had lower average absolute errors than the consensus on its inflation and interest rate forecasts, but higher average errors.

Overall ranking of economic forecasts

In order to obtain an overall ranking, a composite error index was constructed by aggregating the absolute values of the errors for each of the four economic indicators over 1985 to 1991.[2] Table 11.2 compares Finance's overall ranking with that of the private-sector consensus. In fact, Finance not only has a better overall record than the average private-sector forecast but ranks first when compared to the 14 private-sector forecasters as well as the private-sector consensus. Finance's overall ranking is better than its ranking in any one year reflecting the fact that the

[2] Details of the methodology used to rank forecast accuracy and the participants in the survey may be found in the Appendix to "The Department of Finance's Forecasting Record: Update" *Quarterly Economic Review*, Department of Finance, March 1991.

Finance projection was consistently one of the better forecasts. The private-sector consensus ranked third overall. Finance's forecast for 1991 ranked third, well above the seventh place ranking for the consensus.

Chart 11.1
Average forecast errors
1985 to 1991 forecasts

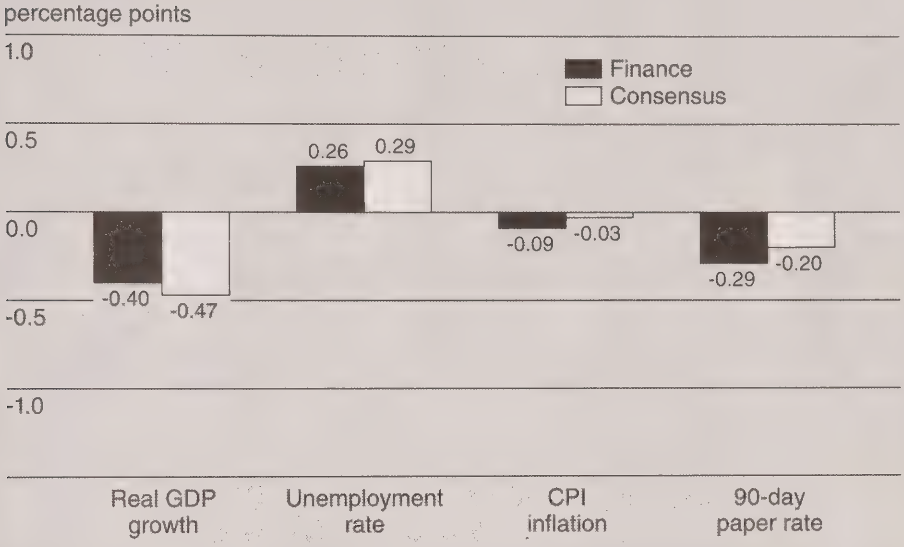


Chart 11.2
Average absolute forecast errors
1985 to 1991 forecasts

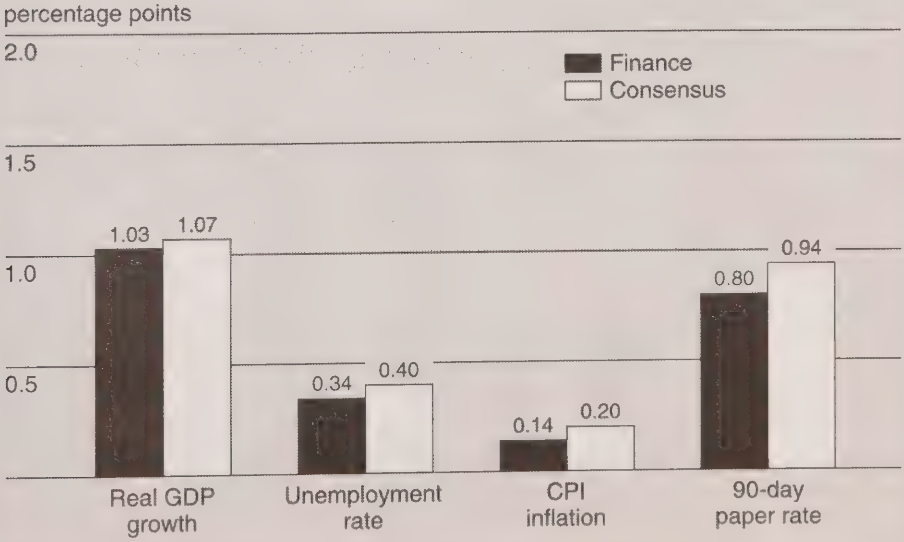


Table 11.2
Rankings for economic forecasts over 1985-1991

	1985	1986	1987	1988	1989	1990	1991	Overall
Finance	7	6	4	2	6	6	3	1
Consensus	8	5	5	8	7	8	7	3

ECONOMIC FORECAST RECORD

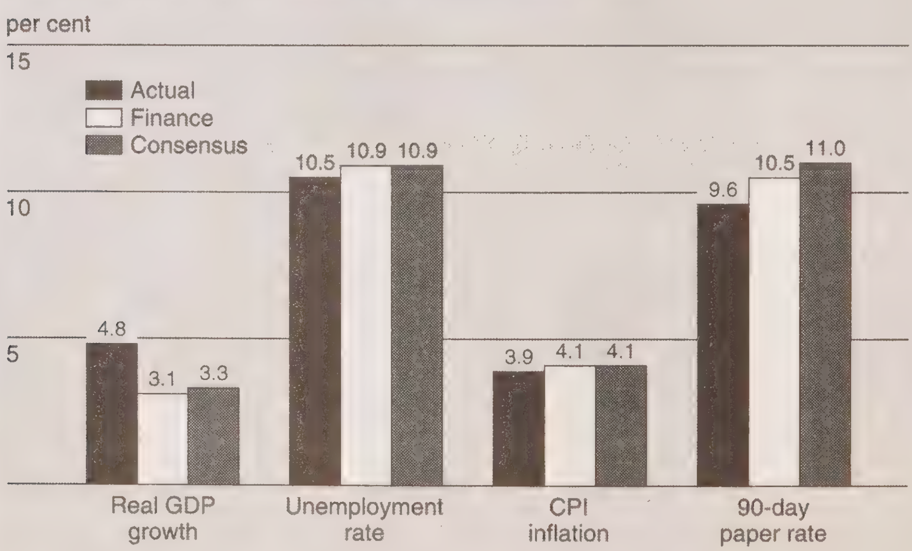
i) 1985

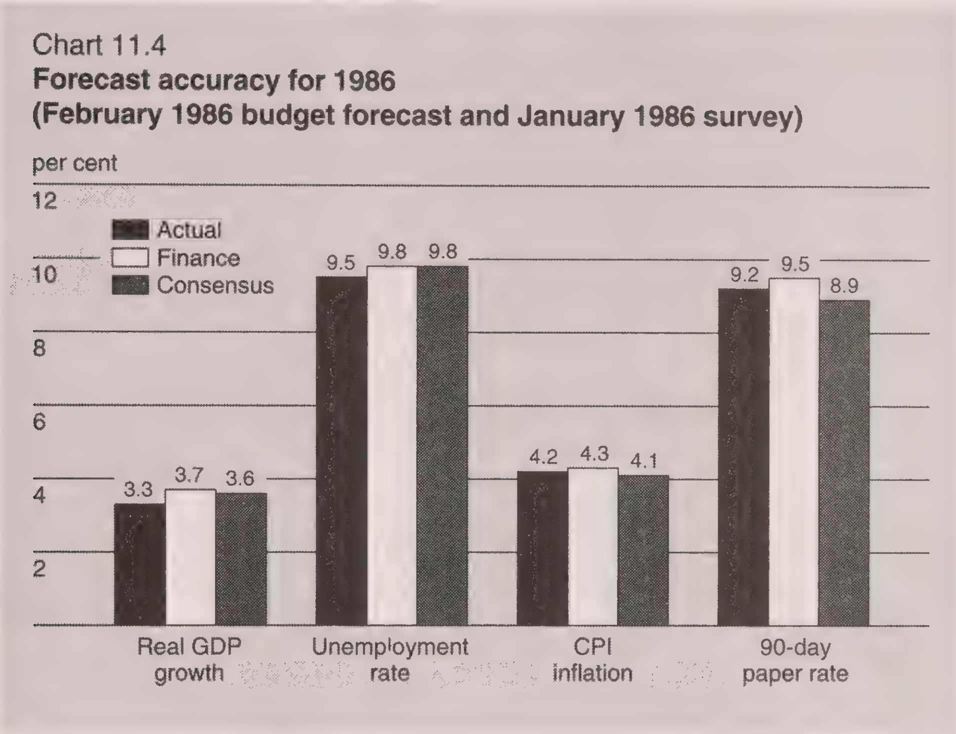
Forecasters did not fully anticipate the sharp drop in interest rates that took place in 1985, although Finance was closer than most (see Chart 11.3). In general, forecasters underestimated real GDP growth and overestimated the unemployment rate. However, the inflation forecasts were quite accurate.

ii) 1986

The volatility in the exchange market and sharp declines in oil and grain prices made 1986 a particularly challenging year for forecasters. The energy price collapse sharply lowered investment spending in the energy sector. Real GDP growth fell below its 1985 rate. Both Finance and the private-sector consensus projected growth to be stronger than what actually occurred (see Chart 11.4). Despite the tendency of forecasters to overestimate growth, the fall in the unemployment rate was underestimated.

Chart 11.3
Forecast accuracy for 1985
(May 1985 budget forecast and April 1985 survey)





The inflation forecasts for 1986 were very accurate, despite the unanticipated decline in oil and grain prices. Interest rates spiked in the first quarter of 1986 but then fell over the remainder of the year to their lowest levels in eight years. Finance underestimated the decline while the consensus overestimated it.

iii) 1987

Forecasters significantly underestimated economic growth and overestimated the unemployment rate again in 1987 (see Chart 11.5). Finance made smaller forecast errors than the private-sector consensus on real growth and the unemployment rate, but larger errors on inflation and interest rates.

iv) 1988

The strength of the Canadian economy in 1988 surprised forecasters, with both Finance and the private-sector consensus significantly underestimating real GDP growth. Even before the plunge in stock prices in late 1987, many forecasters expected that growth would slow in 1988. The robust 1987 growth of consumer spending, particularly durables, and residential investment was thought to be unsustainable. The plunge in stock prices in October 1987 was expected to further worsen growth prospects. Indeed, some thought a recession was imminent.

The 4.7% rate of growth recorded in 1988 was well above the expected pace and higher than in 1987 (see Chart 11.6). The strength in real output was even more surprising given that the 1988 drought reduced real growth significantly. As a result of the unexpected output growth, the unemployment rate was significantly lower than that projected by most forecasters.

Chart 11.5
Forecast accuracy for 1987
(February 1987 budget forecast and January 1987 survey)

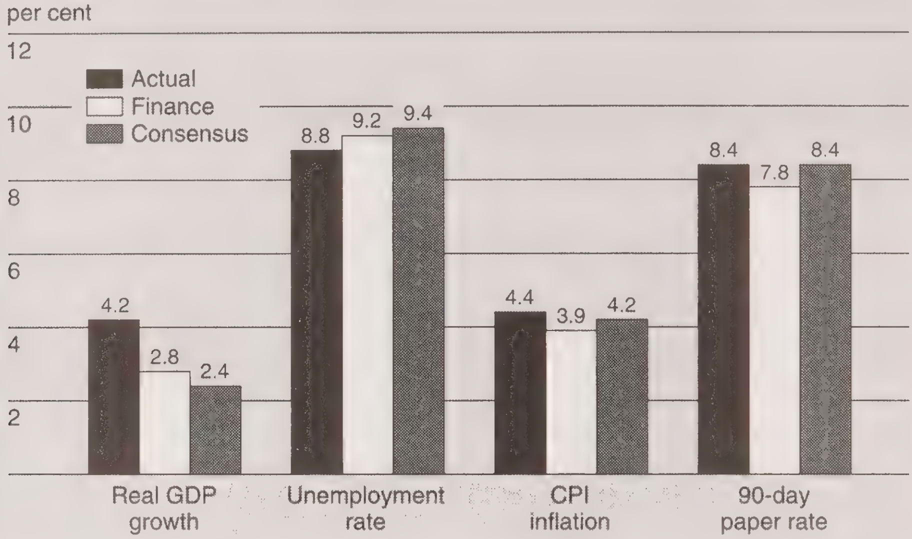


Chart 11.6
Forecast accuracy for 1988
(February 1988 budget forecast and January 1988 survey)

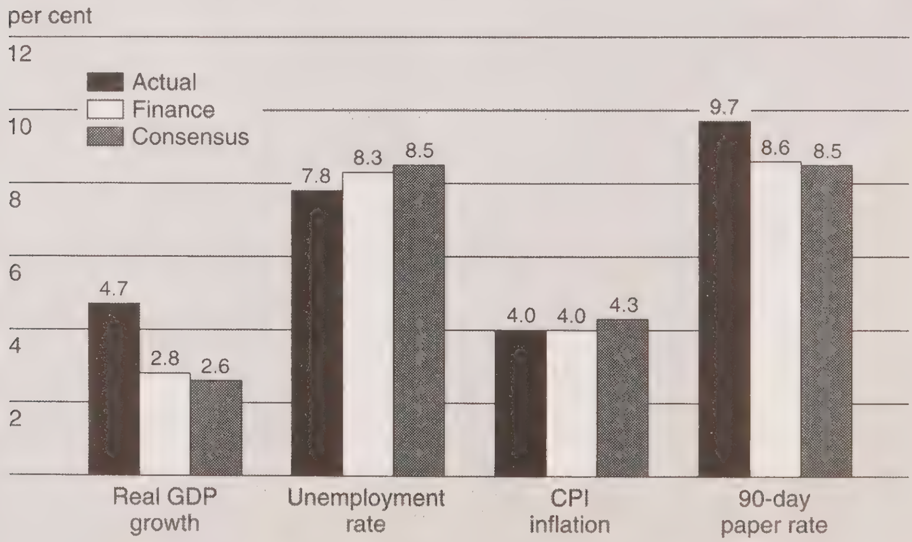
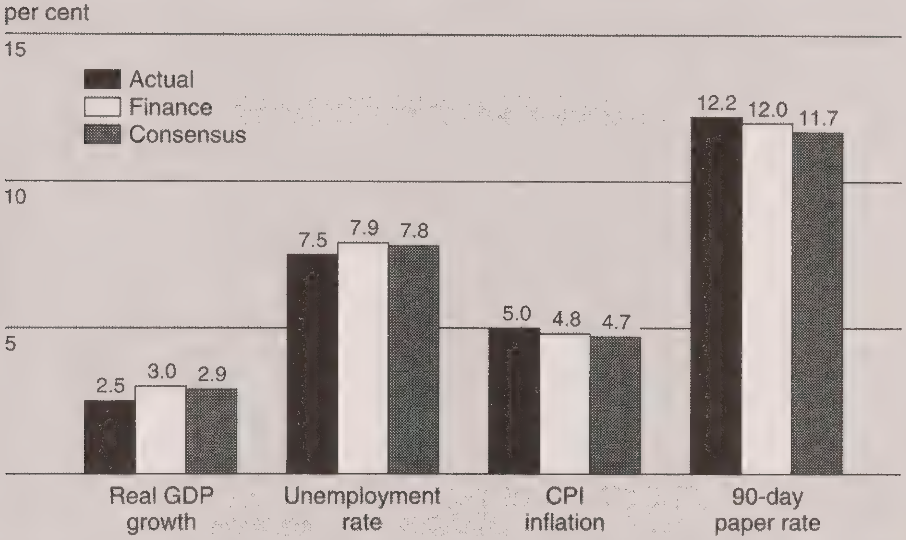


Chart 11.7
Forecast accuracy for 1989
(April 1989 budget forecast and March 1989 survey)



Despite much stronger-than-expected real growth and the drought-induced increase in food prices, inflation forecasts were fairly accurate. Two unexpected developments offset a rise in underlying inflation pressures in 1988 – the fall in world oil prices and the sharp appreciation of the Canadian dollar. The strong real growth and increase in underlying inflationary pressures in 1988 implied much higher interest rates than were generally projected. Both Finance and the private-sector consensus projected that short-term interest rates would average close to 8.5% in 1988, while interest rates actually averaged 9.7%. Finance's forecast for all four of the key economic indicators in 1988 were more accurate than those of the private-sector consensus. Overall, the Department ranked second for the year compared with eighth for the consensus.

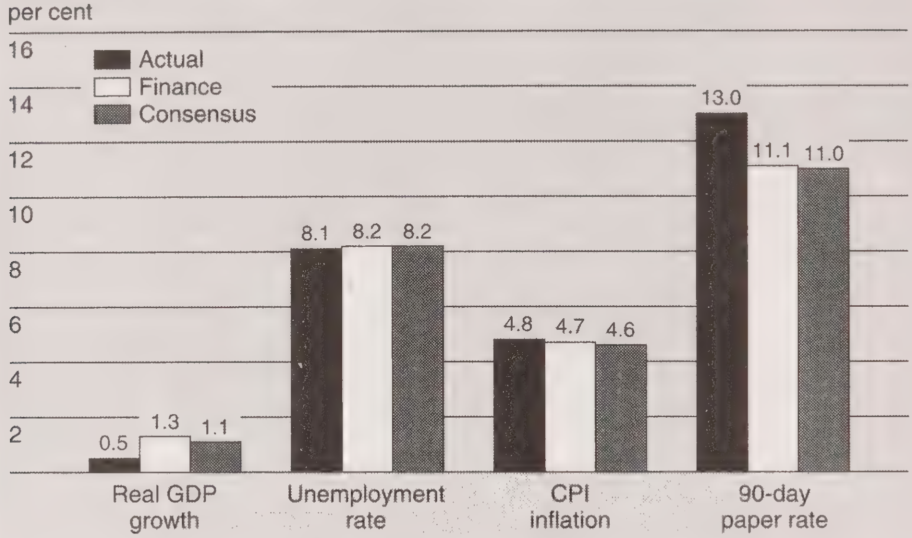
v) 1989

Although forecasters tended to overestimate growth in 1989 (see Chart 11.7), they also tended to overestimate the unemployment rate. In general, forecasters underestimated inflation and interest rates.

vi) 1990

Both the Department of Finance and the private-sector consensus anticipated the slowing in growth in 1990 (see Chart 11.8). The strength of the expansion had raised the level of aggregate demand above the economy's capacity to supply goods and services. Inflationary pressures were high and, as the February 1990 budget indicated, a substantial slowing in growth was necessary to ease these pressures.

Chart 11.8
Forecast accuracy for 1990
(February 1990 budget forecast and January 1990 survey)



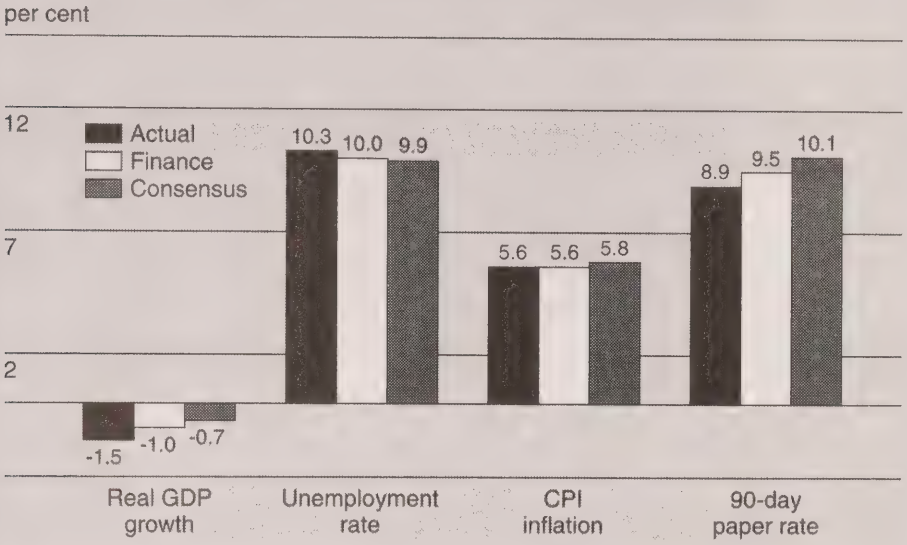
However, forecasters generally underestimated the extent of the slowing. This reflected a number of factors. Underlying inflationary pressures remained stronger than expected through the latter part of 1989 and into 1990. As a result, interest rates rose early in the year rather than declining as expected. Short-term interest rates averaged 13% in 1990, while both Finance and the private-sector consensus had forecast that interest rates would average around 11%. The Iraqi invasion of Kuwait in August and the consequent rise in oil prices raised private-sector uncertainty. This resulted in a greater-than-expected retrenchment by businesses and consumers. Finally, a contraction in output in the United States, beginning in the fourth quarter of the year, reduced the demand for Canadian exports.

Despite the tendency of forecasters to overestimate growth, they also overestimated the unemployment rate. This likely reflects slower labour force growth than most forecasters had expected.

vii) 1991

Both Finance and the consensus overestimated real GDP growth and underestimated the unemployment rate in 1991, although Finance's forecasts were somewhat more accurate (see Chart 11.9). While the recovery from the 1990-1991 recession started in the second quarter of 1991, one quarter earlier than many forecasters had anticipated, there was an unexpected slowing in real growth over the latter half of the year. Moreover, significant downward revisions made last month to the earlier estimates of real GDP in the first through third quarters of 1991 increased the forecast error with respect to real GDP.

Chart 11.9
Forecast accuracy for 1991
(February 1991 budget forecast and January 1991 survey)



As the strength of the recovery waned, interest rates fell more than anticipated. As a result, both Finance and the consensus overestimated short-term interest rates but Finance was much closer to the actual value. Finance's inflation forecast was accurate, while private-sector forecasts tended to be too high.

THE ACCURACY OF THE DEPARTMENT'S DEFICIT FORECASTS

The fiscal situation is extremely sensitive to changes in economic developments. Current sensitivity analysis shows that a 1% increase in economic activity reduces the deficit by $1.4 billion in the first year and by $2.0 billion in the fourth year. A sustained 100-basis point increase in interest rates results in an increase in the deficit of $1.6 billion in the first year and an increase of nearly $3.1 billion by year four.

As a result, the accuracy of the economic forecast is a key determinant in the assessment of the accuracy of the deficit forecast.

Table 11.3 compares the Department's one-year ahead deficit forecast to the actual outcome for the period 1985-86 to 1990-91. In three of the six years, the government met or improved upon the fiscal forecast for the year. Over the entire six-year period, there has been an average annual underprediction of the deficit of only $200 million.

Table 11.3
Budget deficit outcomes versus forecasts

Budget	Fiscal year	Forecast	Outcome
		(billions of dollars)	
May 1985	1985-86	34.0	34.6
February 1986	1986-87	29.5	30.7
February 1987	1987-88	29.3	28.2
February 1988	1988-89	28.9	29.0
April 1989	1989-90	30.5	29.0
February 1990	1990-91	28.5	30.6